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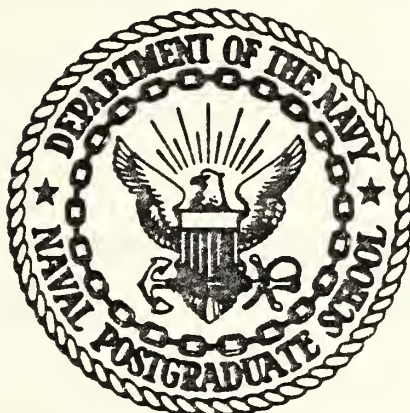
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NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

INTERNATIONAL TERRORISM THREAT ANALYSIS

by

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and

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March 1977

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The conclusions of this thesis provide the decision maker with valid early warning indicators of emerging terrorist threat and a perspective for allocating resources to counter terrorism.

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International Terrorism Threat Analysis

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

NAVAL POSTGRADUATE SCHOOL
March 1977

ABSTRACT

The last decade has witnessed a marked increase in the incidence of international political terrorism. International political terrorism has emerged as a political weapon employed on a worldwide basis by those who are dissatisfied with, or alienated from, the legitimate international and/or national political process. International terrorism is perceived to represent a threat to a wide range of United States national security goals. The hypothesis examined in this thesis is that the threat which international terrorism represents to the United States national security can be measured as a function of the threat perceptions of experts concerned with combating terrorism and is correlated with terrorists' methods of operation, perceived saliency of enemy and the treatment of the event by foreign broadcasts (FBIS). Scale values are calculated which represent the consensus of expert judges' perception of threat. Content Analysis of terrorist statements is employed to measure the saliency of the terrorist enemy perceptions. The methodology of multiple regression analysis is used to determine the underlying aspects of terrorism which combine to explain the level of threat represented by a terrorist incident.

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I. INTRODUCTION

A. PURPOSE

In the past decade, transnational and international terrorist activity has increased at an alarming rate and has been the subject of much concern and expenditure of resources by world political leaders.¹ In particular, the number of terrorist groups, events, targets, victims and damage caused by terrorist groups has increased in almost exponential fashion in recent years. The developing ability of terrorist groups to operate on an international level with modern weapons, means of communication and transportation has increased their power and influence as a political entity. Literature addressing the causes, effects and implications of the new global expansion of terrorism has also increased in almost exponential fashion in recent years; however, there have been very few analytical studies of terrorist activity using statistical, methodological analysis of the nominal, ordinal, interval and ratio data which resulted from incidents initiated by terrorist groups.

The purpose of this study is to explore the effects of terrorist event activity on United States national security, investigating the statistical relationships between threat to United States national security, international terrorist events and saliency of enemy perceptions by terrorist group members.

¹Jenkins, Brian M., International Terrorism: A New Kind of Warfare, The Rand Corporation, 1974.

B. THEORETICAL FRAMEWORK

1. United States National Security Threat

Threat is defined as "an indication of probable evil to come; something that gives indication of causing evil or harm."² Within the context of national security affairs, the sensitivity and responsiveness to threat held by national regimes are critical driving forces behind international behavior and were included within the definition of threat for this study. The concept of national security which was utilized was a very broad generalization which included political, military, diplomatic and economic aspects. A threat, in this context, included any direct or indirect outcome of a terrorist incident which could have been perceived to be inimical to the national security. National images and national agendas gave the identification and shape to threat phenomena. National publics of modernized countries are conditioned to respond to reports of threat situations in certain ways. Latent threat persists and becomes activated from time to time through symbolic triggering. Latent threat recognition involves the awareness that a possible condition of danger exists but is in the background of affairs. Activated threat is cognitive, existential phenomena brought to the foreground by its situational immediacy.

Activation of the threat associated with international terrorism is contextual and dependent upon the interaction of a terrorist incident with the existing local or international situation. Measuring the immediacy and degree of threat associated with an incident of international terrorism is best done by determining the perceptions of those experts responsible for national policy concerning terrorist activity and of those scholars and researchers studying the subject of terrorism.

²Barnhart, Clarence L., The American College Dictionary, p. 1262, Random House, 1956.

The cognitive awareness of a developing threat by a legitimate decision maker is a function of organizational structure, experience, education and attitude or frame of reference. For one to accurately recognize a developing threat requires an awareness of identifiable indicators of threat and a sensitivity to both the qualitative and quantitative aspects of threat.

Underlying the methodology of this thesis is the assumption that analysis of experts' perceptions regarding the threat can provide insight into the aspects of threat which trigger increased threat awareness on the part of decision makers.

Terrorism has had traumatic influences upon United States national policies, including the interruption of normal diplomatic relations, disruption in trade and economic relations, transportation services and agreements with other nation states vital to United States national security. In addition, the economic and manpower resource burden to the United States has increased drastically as new and more intense security measures are established to counter potential terrorism.

The development of a quantitative measure of the qualitative aspects of terrorist threat is intended to provide decision makers with greater insight into those aspects which are statistically associated with increasing or developing threat.

Substantial disagreement exists concerning the threat which international terrorism represents. At its best, the concept of threat is very soft and difficult to measure. The reality of what is threatening and the degree of threat represented can be operationally defined in a consensus of the perceptions of experts concerned with the subject. Implied in the investigation was a determination of the underlying aspects of international terrorism which contributed significantly to the threat perceptions of experts.

2. Saliency of Enemy Perceptions

Generally, a group defines its enemy or enemies as another actor perceived to be threatening, harmful or injurious to the group's welfare or wishes.

As most groups, terrorist groups have contradictory and mutually exclusive interests with most political actors. Identifying and combating enemies for the purpose of managing conflict and realizing goals is inherent in political strategies. Once a terrorist group sees a political actor as a source of frustration or threat, negative attitudes are generated and any act of hostility by either the terrorist group or the political actor is conducive to producing greater hostility between them. When members of a terrorist group (rightly or wrongly) perceive a threat, unjust treatment or invasion of rights coming from a political actor, opinion is crystallized, slogans are formulated and the group itself, as well as its goals, are affected by reciprocal antagonisms.

Through identifying an enemy and portraying him as the incarnation of evil, the terrorist group assumes a position of self-righteousness. In effect, this means transcending the threat by elevating the group to a position of superiority. Such assumptions tend to produce grandiose feelings of power, invulnerability and strength.

Self-righteousness is also a means of reducing stress, of protecting the terrorist group against threats, of satisfying group needs for security or emotional release. It is a method of reducing internal conflict by displacing those conflicts onto external scapegoats and achieving greater group cohesiveness. In particular, the enemy becomes an integral part of the terrorist group's immediate and long-range problems of survival, maintenance of group solidarity and fulfillment of

perceived (even loosely defined) goals. A more in-depth theoretical base on the subject of enemies has been written by Finlay, Holsti and Fagen.³

The higher the degree of saliency of the perceived enemy of a terrorist group, the greater the perceived threat to the group and the more urgent the need for an appropriate response to that threat. Accordingly, it is hypothesized that the greater the degree of saliency of a terrorist group's perceived enemy, the greater the degree of probable hostile response directed at that threat (the perceived enemy), with the consequent impact on stability.

Appendix A lists the saliency of enemy perception dimensions used as the theoretical framework for developing intensity categories of content analysis when coding terrorist statements.

C. HYPOTHESIS

It is hypothesized that the threat to United States national security by terrorist activity is directly related to the amount of Foreign Broadcast Information Service (FBIS) coverage, the number of non-combatants killed, the perceived saliency of a terrorist group's defined enemy, the demands made upon legitimate institutional actors and the number of terrorist groups participating in an event.

Verification of the hypothesis would provide the decision maker with verifiable measurements of terrorist activity by which a determination is possible concerning emerging or developing threat. Accordingly, advanced accurate decisions would be possible concerning the allocation of resources to counter the potential threat.

³Finlay, David J., Holsti, Ole R., and Fagen, Richard B., Enemies In Politics, Rand McNally, 1967.

D. METHODOLOGY

Formalized procedures were developed for the collection of information to facilitate the production of raw data used in developing specific variables for statistical manipulation and analysis.

1. Data Collection

In an effort to obtain information concerning threat to United States national security, a questionnaire was developed to obtain responses from individuals who were considered to be experts in the fields of national security affairs and terrorist activity. This procedure was conducted to investigate the perceptions held by experts regarding the threat which specific international terrorist events represent to the national security objectives of the United States. The assumption is that the reality of the threat of terrorism is expressed as a statistical consensus of the perceptions of those experts closely associated with the problem. Various methods of content analysis were employed to collect data on FBIS Daily Report content and saliency of enemy perceptions. Raw statistical data on the number of foreign non-combatants that were killed, the demands made upon legitimate organizational actors, the number of terrorist groups participating in an event and the number of domestic non-combatants killed was obtained by in-depth study and analysis of each terrorist event selected for study.

2. Data Analysis

Following the collection and organization of raw data to develop variables for statistical manipulation, the newly acquired data was submitted to frequency distributions, transformation of raw data as required to obtain normality, bivariate correlation, factor analysis and finally, multiple regression analysis.

II. DATA COLLECTION

A. INDEPENDENT VARIABLES

1. The ITERATE File

The International Terrorism: Attributes of Terrorist Events (ITERATE) File was utilized to obtain a universe of analysis and a sample for detailed analysis. The ITERATE code book⁴ was used to interpret the statistical data in the ITERATE computerized filing system for information germane to terrorist events. ITERATE was based upon public source documents, including articles in the New York Times and the Washington Post, written at the time of the incidents, and two chronologies of international terrorism developed by The Rand Corporation. The file was assembled for use by the Political Research Section of the Central Intelligence Agency, from which it was obtained. The file covers all international terrorist events for the period 1968 to 1974 for which there is public source material.

The universe of analysis was defined as that set of international terrorist incidents which may have represented a threat to the United States national security. The concept of national security which was utilized was a very broad generalization which includes political, military, diplomatic and economic aspects.

A set of terrorist incidents with the potential to represent this type of threat to the national security were selected, using the following criteria:

- a. United States government installation or official involved as a target,

⁴Micklus, Edward F., ITERATE: International Terrorism: Attributes of Terrorist Events, Office of Political Research, Central Intelligence Agency, 1976.

- b. United States corporation involved as a target,
- c. United States citizen involved as a target,
- d. United States government was subjected to demands,
- e. United States ship or aircraft was involved,
- f. The terrorist incident took place in any of the locations listed in Table I.

Table I. Terrorist Event Locations

United States	Portugal	South Africa
Canada	West Germany	Iran
Puerto Rico	Italy	Turkey
Mexico	Yugoslavia	Egypt
Panama Canal Zone	Greece	Israel
Panama	Cyprus	Philippines
Venezuela	USSR	Australia
United Kingdom	Denmark	New Zealand
France	Iceland	Guam
Spain	Rhodesia	American Samoa
Gibraltar		

An incident meeting any single criteria was selected for inclusion in the universe of analysis. The list of inclusive locations was based upon alliances, trade agreements, possession of strategic materials or strategic location, any of which could result in an international terrorist incident in that location having an inimical effect on United States interests.

Applying these criteria to the 539 cases in the ITERATE file resulted in a set of 386 cases. Of the 386 cases, those incidents in which an identifiable terrorist group was involved were selected. In view of the nature of the ITERATE file (which was developed to apply quantifiable data to terrorist events), those events having unknown terrorist group identification also had a preponderance of missing data for the majority of data associated with them, precluding in-depth analysis of the event.

In addition, the measures used within this study were directly associated with established terrorist groups. This selection reduced the number of cases to 214. This selection was based on the nature of the independent variable being primarily applicable to terrorist incidents involving an established known terrorist group. The set of 214 cases was established as the universe for analysis. From this universe, a random sample of 29 cases was selected for detailed analysis and development of the dependent and independent variables.

Appendix B contains the detailed description of the 29-case random sample.⁵ Table II lists the basic correlation between the random sample and the universe of analysis.

Table II. Correlation Between Random Sample of 29 Cases
From 214 Cases In The Universe of Analysis

<u>VARIABLE</u>	<u>CORRELATION COEFFICIENT</u>
Type of U.S. Victim	.92444
Year of Incident	.96052
Rank of Hostage	.72851
Type of Event	.9473
Identity of Terrorist Group	.58099
Location of The Event	.63651

Quantitative data from the ITERATE File were initially selected as independent variables based on the following criteria:

- a. A reasonable association with the threat which a terrorist incident could be perceived to represent to United States national security.
- b. Composed of interval or ratio level data enabling the utilization of parametric and regression analysis as an analytical tool.

Table III is a listing of variables which met those criteria and were initially selected as Potential Independent Variables.

⁵Jenkins, Brian M., Rand Chronology, The Rand Corporation, 1974.

Table III. Potential Independent Variables

-
1. Number of terrorist groups involved.
 2. Number of terrorist nationalities.
 3. Number of terrorists.
 4. Number of male terrorists.
 5. Number of female terrorists.
 6. Mean age of group members.
 7. Age range of group members.
 8. Number of victim nationalities.
 9. Number of hostages.
 10. Number of governments upon which demands were made.
 11. Number of international entities upon which demands were made.
 12. Number of domestic non-combatants wounded.
 13. Number of foreign non-combatants wounded.
 14. Number of police wounded.
 15. Number of domestic non-combatants killed.
 16. Number of foreign non-combatants killed.
 17. Number of police killed.
 18. Dollar value of other losses.
 19. Number of prisoners whose release is demanded.
 20. Number of prisoners released.
 21. Number of terrorists dead at scene in a shoot-out.
 22. Number of terrorists who blew themselves up at scene.
 23. Length of the incident.
-

2. Content Analysis

a. Purpose

One of the major hypotheses of this study is that the threat to United States security will be directly related to how clearly a terrorist group perceives its enemy. For example, when a terrorist group such as the Movimento Revolucionario-8 of Brazil kidnapped the U.S. Ambassador, they made direct statements in the press reflecting that the U.S. was their primary enemy and any government or person associated with U.S. interests are to be targeted, demanding the release of 15 prisoners, being held by Brazilian authorities, who were eventually released and flown to Mexico. In contrast, a group calling itself Nationalist Group For The Liberation of Palestine gave two vacationing American females a concealed bomb as a going away gift in Italy. The bomb damaged the

luggage compartment of the El Al Airlines plane, but the group failed to make statements as to their intentions or cause. In an effort to measure a terrorist group's perception of its enemy's saliency, two intensity-directed content analysis procedures were followed. During the process of collecting direct terrorist statements to analyze their content, several quantitative content collection methods were employed.

b. Sampling Universe, Population and Unit of Analysis

The major source of data collected, both of qualitative and quantitative content, was the Foreign Broadcast Information Service (FBIS) Daily Report, which contains current news and commentary monitored from foreign broadcasts, news agency transmissions, newspapers and periodicals. FBIS is published in eight volumes: (1) People's Republic of China, (2) Eastern Europe, (3) Soviet Union, (4) Asia and Pacific, (5) Middle East and North Africa, (6) Latin America, (7) Western Europe and (8) Sub-Saharan Africa. The FBIS Daily Report is on file for public reference at the Library of Congress and at public libraries throughout the United States. All FBIS Daily Reports were screened for data relevant to the twenty-nine terrorist events studied from between thirty days prior to the initiation of the event until thirty days after completion of the event.

The New York Times daily newspaper was used to augment data collected from FBIS. Additional terrorist statements were found to be available in New York Times that were not available in FBIS. Only direct terrorist statements were obtained from New York Times for qualitative content analysis. No quantitative content data was compiled from New York Times for this study.

Classified material, including manuscripts, files, documents and records containing statements of terrorist group members, are

available at the Office of Political Research, Central Intelligence Agency and the Cabinet Committee to Combat Terrorism, U. S. Department of State, as well as many large metropolitan Police departments and the Federal Bureau of Investigation. Information contained within these sources would be ideal data for qualitative content analysis methods; however, it was decided early in the formation of this study to develop a methodology based on open source literature, which could be applied using classified data should it be available to the researcher.

c. Terrorist Event Parameters

Specific volumes of FBIS Daily Reports were selected for screening based upon the country in which the event was initiated, the nationality of the terrorist group members, the nationality of any victims, or any country which was further implicated by having demands made upon it or by granting a safe haven to the terrorists or victims of the event.

In collecting data for analysis from FBIS and New York Times, the analyst screened all Daily Reports from thirty days before the initiation of the event to thirty days following the completion of the event. The initiation and completion dates for each event were obtained from the ITERATE file referenced in paragraph 1, page 16.

Data was compiled from FBIS Daily Reports which related to the terrorist group responsible for the event within the time period stipulated above. Again, the terrorist group responsible was originally determined by the ITERATE file; however, the terrorist group identified by the ITERATE file as responsible for each of the twenty-nine events was verified by the analyst from supporting statements in FBIS or New York Times. It became evident early in the collection of data for analysis that some terrorist groups (such as the IRA and PFLP) were quite active, receiving a great

deal of coverage in FBIS concerning their activities, prior to and following the event, which did not relate directly to the event under study. Accordingly, a more discriminating study was undertaken of these reports in FBIS to isolate a terrorist group's general activity from information relating to the specific event under study.

The target or object of the terrorist event was also focused upon in reviewing specific FBIS Daily Reports within the time frame specified above for specific information relating to the event. In many cases, there were articles, and even terrorist statements, directed toward what was later the target of the event, which provided data for future content analysis.

d. Quantitative Methodology

Using content analysis, eight variables were constructed for each of the twenty-nine events under study: (1) number of FBIS lines prior to the event, (2) number of FBIS lines after the event, (3) total number of FBIS lines, (4) number of FBIS articles relating to the event, (5) number of FBIS issue dates containing information on the event, (6) number of Atomic Evaluative Assertion Analysis statements, (7) number of Expanded Directional Analysis statements and (8) number of lines in FBIS within country of incident's occurrence.

Data compiled for "FBIS lines prior to the event" was obtained by reviewing all material specified by sub-paragraph c above on Terrorist Event Parameters which occurred from thirty days prior to the initiation of the event up to, but not including, lines relating to the event after its initiation.

Data compiled for "FBIS lines after the event was initiated" was obtained by reviewing all material specified by sub-paragraph c above on Terrorist Event Parameters which occurred from the actual time of

initiation of the event to thirty days following the completion of the event. For incidents such as bombings or assassinations, the time spectrum would be thirty days; however, for such incidents as hijackings or kidnappings, the time spectrum would extend from thirty days after the release of hostages, or other indicators of the event's termination. Accordingly, many of the events had more than thirty days coverage for this method of data collection.

"Total number of FBIS lines" is the total of the number of FBIS Daily Report lines before and after the event. Accordingly, all information from thirty days prior to the initiation of the incident to thirty days following termination of the event was compiled under "total lines."

Since some events became international in their physical domain by moving from one country to another or by terrorists placing demands on nation states other than the one in which the event was initiated, a line count was conducted for only that FBIS Daily Report content which was contained within the specific country in which the event was initiated. The same parameters for collecting data as prescribed in sub-paragraph c above were used.

Using Terrorist Event Parameters stipulated in sub-paragraph c above, a count of FBIS articles relating to the event was compiled for each of the twenty-nine events. (Later in this study, an article will be defined as a theme for qualitative analysis.)

"FBIS Daily Report issue dates" containing information relevant to each of the twenty-nine events were counted under the requirements set forth in sub-paragraph c, Terrorist Event Parameters, above.

Using the qualitative method of Expanded Directional Analysis, the number of terrorist statements was totaled for each of the twenty-nine

events, also following the stipulations of sub-paragraph c, Terrorist Event Parameters, above.

In addition, using Atomic Evaluative Assertion Analysis, the number of terrorist statements was totaled for each of the twenty-nine events. Using this method, the number of statements was generally less than the number of statements compiled under Expanded Directional Analysis since Atomic Evaluative Analysis requires a complete grammatical sentence with structure for coding; whereas, phrases can be coded using Expanded Directional Analysis.

e. Qualitative Methodology

Two intensity directed content analysis techniques were employed, using statements by terrorist group members contained in FBIS and New York Times from thirty days before initiation of the event to thirty days after termination of the event. Data analysis was based on statements contained within quotation marks in FBIS and New York Times which were directly attributable to a member of the terrorist group known to be responsible for the initiation or conduct of the event. After screening all FBIS Daily Reports for terrorist statements, it became apparent that an additional source of content would be required because of the limited number of statements in open source literature. Accordingly, New York Times was used to locate additional terrorist statements for analysis.

Atomic Evaluative Assertion Analysis, as developed by Osgood, Saporta and Nunnally,⁶ employs an Attitude Object assigning a negative or positive value to the subject of the sentence. A Verbal Connector, which is the predicate or verb of the sentence, is assigned a score between one

⁶Holsti, Ole R., Content Analysis for the Social Sciences and Humanities, p. 124, Addison-Wesley, 1969.

and three, depending on the past, future or present tense of the verb, respectively. In addition, a positive or negative value is assigned, depending upon the connotation of the predicate. Undetermined or neutral verbs and/or predicates are assigned positive scores. Also, a Common Meaning Term or second Attitude Object is coded by assigning a value of between minus three and plus three, depending upon the degree of threat denoted by the object, where minus three is most threatening and positive three is least threatening. Figure 1 defines the procedure used to code terrorist statements using Atomic Evaluative Assertion Analysis.

(ATTITUDE OBJECT)	(VERBAL CONNECTOR)	(COMMON MEANING TERM)	=	PRODUCT
(+ 1)	(-3 to +3)	(-3 to +3)	=	(-9) to (+9)

Figure 1. Atomic Evaluative Assertion Analysis Statement Scoring

Each complete terrorist statement is coded for the article in which it appears. A mean score is obtained by dividing the number of statements coded into the cumulative score obtained by algebraically combining the products of the coded statements. The resultant mean is termed the Theme Score for that specific article. An event's Atomic Evaluative Assertion Analysis score is obtained from the mean of Theme Scores. Table IV is an example of actual terrorist statements scored using Assertion Analysis.

Table IV. Atomic Evaluative Assertion Analysis
Terrorist Statement Coding Example

Event: Bombing of Australian Tourist Office in New York City, 4 July 1968.				
ATTITUDE OBJECT	VERBAL CONNECTOR	COMMON MEANING	=	PRODUCT
(+ 1)	(-3 to +3)	(-3 to +3)		
"We	(+1) are risking	(-3) imprisonment."	(-2) =	(-6)
"War equipment	(-1) is given	(+3) to criminals."	(-2) =	(-6)

(Table IV. Continued)

Event: Kidnapping of U.S. Ambassador to Brazil, 4 September 1969

ATTITUDE OBJECT (+1)	VERBAL CONNECTOR (-3 to +3)	COMMON MEANING (-3 to +3)	=	PRODUCT
"Those who mistreat(-1)	should take (+2)	caution." (-1)	=	(-2)
"The situation (+1)	was (+1)	not good." (-1)	=	(-1)
"We (+1)	feel (+3)	we are free." (+3)	=	(+9)

Expanded Directional Analysis, as developed by Kaplan and Goldsen,⁷ employs the use of a directional differential scale where the researcher assigns a negative, positive or neutral ordinal judgment to the action (verb) of the statement, phrase or sentence. The statement's Verbal Connector is assigned an intensity score of between one and three, depending upon the tense of the verb, where present tense is assigned a score of three, future tense is assigned a score of two, and past tense is assigned a score of one. In addition, a numerical value is assigned to the Common Meaning Term (or object) of the statement which has been divided into six ordinal categorical judgment groupings, most threatening being equal to a minus three and least threatening being equal to plus three. Figure 2 defines the procedure used to code terrorist statements using the Expanded Directional Analysis method. Each statement is coded for the article in which it appears.

(DIRECTIONAL DIFFERENTIAL)	(VERBAL CONNECTOR)	(COMMON MEANING TERM)	=	PRODUCT
(-2/+2)	(1 to 3)	(-3 to +3)	=	(-18)to(+18)

Figure 2. Expanded Directional Analysis Statement Scoring

⁷Budd, Richard W., Content Analysis of Communications, p. 54, Macmillan, 1967.

Event Scores are obtained using the same procedures as in Atomic Evaluative Assertion Analysis. Table V is an example of the raw data scoring of each event found to have direct statements from terrorist group members within the parameters stated above.

Table V. Expanded Directional Analysis Terrorist Statement Coding Example

Event: Killing of U.S. Military Group Commander in Guatemala, 16 Jan 68				
DIRECTIONAL DIFFERENTIAL (-2/+2)		VERBAL CONNECTOR (1 to 3)	COMMON MEANING (-3 to +3)	= PRODUCT
"brought" (1)		"brought" (1)	"combative action" (-2)	= (-2)
"are risking" (-2)		"are risking" (3)	"imprisonment" (-2)	= (-12)
- - - - -				
Event: Kidnapping of U.S. Labor Attache to Guatemala, 6 Mar 70				
"be" (1)		"be" (2)	"publicized" (2)	= (4)

f. Reliability

Two basic procedures were employed to insure reliability of data collected and coded: computation of a reliability score for coders and production of standards for the Attituted Object, Verbal Connector and Common Meaning Term categories.

For content analysis, reliability means repeatability with consistency of results. In measurement (or the assignment of scores), reliability means that coders using the same techniques on the same material will get substantially the same results, which is sometimes referred to as information stability. Accordingly, a reliability test was employed as developed by Holsti.⁸ Figure 3 demonstrates the use of

⁸Budd, p. 68.

a reliability test where $C_1 + C_2$ is the total of category assignments made by both coders.

$$R = \frac{2(C_{1,2})}{C_1 + C_2}$$

Figure 3. Two Coder Reliability Test

Using the formula for two separate coders to test the reliability for the Attitude Object, Verbal Connector and Common Meaning Term categories where judgments were required on all terrorist statements for two separate events, a reliability score of .98 was achieved.

In addition, for Atomic Evaluative Assertion Analysis, standard lists of categories were constructed to assist the coder and insure reliability between different coders and scoring of different statements, themes and events by the same recorder. Appendix C is an alphabetical listing of all Attitude Objects (subjects) which were assigned negative values (e.g.: attack, barricade, bomb, death, detain, fear, torture, violate, etc.). All other nouns representing the subject of the statement being coded were assigned a positive value. Appendix D is an alphabetical list of Verbal Connectors (e.g.: accuse, demand, endanger, kidnap, risking, struck, violate, etc.). As stated previously, the tense of the verb in the predicate determined if the value was one, two or three, depending respectively upon the present, future or past tense. The degree of threat reflected by a terrorist statement was the criteria used for determining six distinct categories for evaluating the Common Meaning Term. Appendix E is an alphabetical listing of terms representing the object of a

statement and the assigned value of negative three scores for most threatening terms to positive three scores for least threatening terms, as defined by perceptions of threat in Chapter I.

g. Validity

Two checks were made for insuring that the results of both the Directional Assertion and Atomic Evaluative Analysis were valid: first was the face validity of each theme, and secondly, the final raw data event scales defined below in paragraph i were examined to insure logical validity.

For each theme, the overall impression of the analyst concerning the article was compared with the theme score derived by the method introduced in paragraph g above to insure that both the impression and the raw theme score were compatible with one another. Primarily, this validity check took the form of checking to determine if the subjective impression given by reading the article was as negative in effect as the raw theme score seemed to indicate.

Finally, each of the events were compared to one another, along with the event scores, to insure that a dramatic difference in the conduct of the event was evidenced by some difference in the raw event scores. For instance, an event of an attempted bank robbery incident was compared with an incident involving kidnapping, torture and finally assassination, the latter of which one might logically expect to produce statements indicating a greater degree of perceived threat by the perpetrators than the first incident.

h. Level of Data

The ordinal judgments of the coder for qualitative content analysis, combined with the Directional Assertion and Atomic Evaluative

Assertion methodologies, both employ intensity and direction techniques which qualify data for interval interpretations of findings when compared with content information examined under the same standards using the same source and universe of analysis.⁹ Accordingly, statistical manipulation of data addressed in Chapter III on Data Analysis is based on interval event scales.

i. Independent Variable Threat Perception Scales

Number of Lines in FBIS Prior To The Event, Number Of Lines In FBIS After The Event, Total Number Of Lines In FBIS For Each Event, Number Of FBIS Daily Report Issues Relating To The Event, Number Of FBIS Articles Relating To The Event, Number Of FBIS Lines In The Country In Which The Event Occurred, Number Of Expanded Directional Terrorist Statements In FBIS and New York Times, and Number Of Atomic Evaluative Assertion Analysis Terrorist Statements in FBIS and New York Times comprise the eight quantitative content variables. Atomic Evaluative Assertion Analysis and Expanded Directional Analysis comprise the two qualitative content analysis variables. Below is a list of the ten content variables with the three top (or highest scoring) events and the three bottom (or lowest scoring) events for each variable. The event identification and date is followed by the raw score.

(1) FBIS Lines Prior To The Event:

- (a) #56 Attack on GM Plant, Uruguay, 1969 -- 332 lines;
- (b) #102 Kidnapping U.S. Attache, Guatemala, 1970--155 lines
- (c) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 131 lines;
- (d) #281 Bombing Israel Airliner, Italy, 1969 -- 0 lines;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 lines; and
- (f) #350 Bombing Dance Hall, Glasgow, 1973 -- 0 lines.

(2) FBIS Lines After Event:

- (a) #161 Hijacking Airliner, Jordan, 1970 -- 2665 lines;

⁹Budd, p. 32.

- (b) #112 Hijacking Airliner, Japan, 1970 -- 1227 lines;
- (c) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 131 lines;
- (d) #281 Bombing Israel Airliner, Italy, 1972 -- 0 lines;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 lines; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 lines.

(3) Total FBIS Lines Per Event:

- (a) #161 Hijacking Three Airliners, Jordan, 1972 -- 2665 lines;
- (b) #112 Hijacking Airliner, Japan, 1970 -- 1280 lines;
- (c) #68 Kidnapping U.S. Ambassador, Brazil 1969 -- 995 lines;
- (d) #281 Bombing Israel Airliner, Italy, 1972 -- 0 lines;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 lines; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 lines.

(4) FBIS DAILY REPORT Issues Per Event:

- (a) #161 Hijacking Three Airliners, Jordan, 1970 -- 23 issues;
- (b) #56 Attack on GM Plant, Uruguay, 1969 -- 20 issues;
- (c) #68 Kidnapping U.S. Ambassador, Brazil 1969 -- 16 issues;
- (d) #281 Bombing Israel Airliner, Italy, 1972 -- 0 issues;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 issues; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 issues.

(5) FBIS Articles Per Event:

- (a) #161 Hijacking Three Airliners, Jordan, 1970 -- 91 articles;
- (b) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 32 articles;
- (c) #56 Attack on GM Plant, Uruguay, 1969 -- 26 articles;
- (d) #281 Bombing Israel Airliner, Italy, 1972 -- 0 articles;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 articles; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 articles.

(6) FBIS Country Lines Per Event:

- (a) # 161 Hijacking Three Airliners, Jordan, 1970 -- 1679 lines;
- (b) # 68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 883 lines;
- (c) # 471 Premier Carrero Assinated, Madrid, 1973 -- 483 lines;
- (d) # 281 Bombing Israel Airliner, Italy, 1972 -- 0 lines;
- (e) # 283 Bombing U.S. Embassy, Athens 1972 -- 0 lines; and
- (f) # 350 Bombing Dance Hall, Glasgow, 1972 -- 0 lines.

(7) Number of Atomic Analysis Statements Per Event:

- (a) #68 Kidnapping U.S. Ambassador to Brazil, 1964 -- 199 statements;
- (b) #161 Hijacking Three Airliners, Jordan, 1970 -- 113 statements;
- (c) #470 Bombing in London, 1973 -- 92 statements;
- (d) #281 Bombing Israel Airliner, 1972 -- 0 statements;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 statements; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 statements;

(8) Number of Directional Analysis Statements Per Event:

- (a) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 214 statements;
- (b) #161 Hijacking Three Airliners, Jordan, 1970 -- 124 statements;

- (c) #470 Bombing in London, 1973 -- 101 statements;
- (d) #281 Bombing Israel Airliner, Italy, 1972 -- 0 statements;
- (e) #283 Bombing U.S. Embassy, Athens, 1972 -- 0 statements; and
- (f) #350 Bombing Dance Hall, Glasgow, 1972 -- 0 statements.

(9) Atomic Assertion Content Analysis:

- (a) #517 Bombing, Manchester, 1974 -- (-6.00) assertion;
- (b) #50 Attempted Bombing Cuban Consulate, Montreal, 1969 (-4.00);
- (c) #419 Attempted Hijacking Israel Airliner, Greece, 1973 -- (-3.50);
- (d) #112 Hijacking Airliner, Japan, 1970 -- (+0.67) assertion;
- (e) #454 British Consul Kidnapped, Mexico, 1973 -- (+1.50); and
- (f) #281 Bombing Israel Airliner, Italy, 1972 -- (+2.00) assertion.

(10) Expanded Directional Content Analysis:

- (a) #517 Bombing, Manchester, 1974 -- (-6.00) assertion;
- (b) #50 Attempted Hijacking Israel Airliner, Greece, 1973 -- (-5.50);
- (c) #336 Turkish Consul General Murdered, Los Angeles, 1973 -- (-3);
- (d) #112 Hijacking Airliner, Japan, 1970 -- (+0.72) assertion;
- (e) #281 Bombing Israel Airliner, Italy, 1972 -- (3.00); and
- (f) #454 British Consul Kidnapped, Mexico, 1973 -- (+3.4) assertion.

Each quantitative analysis scale has a rank order ranking from most to least number of lines, articles, dates or statements. The two qualitative scales have a rank order from most salient enemy threat, as perceived by terrorist group members, to least perceived threat.

B. DEPENDENT VARIABLE

The concept of a survey of expert opinion as a means of measuring the expert's threat perceptions and utilization of statistical methods to combine the responses of the experts into a scale of threat was developed as a means of obtaining a quantitative measure of threat.

A questionnaire was developed which requested the experts to provide ordinal data by ranking the sample terrorist incidents in the order of the threat which they perceived the incident to represent to United States national security objectives. The concept of threat and national security objectives was left intentionally vague in the questionnaire to tap the spontaneous, undirected responses of the experts.

The responses to the questionnaire were developed into an interval level scale where each incident was assigned an interval level value by a statistical process based on the following assumptions concerning the behavior of the experts:

1. The experts cannot directly express their perceptions concerning the threat of an incident in terms of an interval scale value, but are able to rank the incidents in relation to all others in accordance with their perceptions of the threat which each represents.

2. Over the population of the experts, their perceptions of the threat are normally distributed random variable.

3. All incidents possess the same variance of threat perceived over the population of experts.

4. The correlation coefficient for the threat between any pair of incidents is the same.¹⁰

¹⁰Torgerson, W. S., Theory and Methods of Scaling, Wiley, New York 1958.

The list of experts was developed through contact with governmental and military organizations responsible for the development of policy recommendations for countering terrorism, and from attendance lists of recent conferences concerned with the subject of terrorism.

The list was comprised of experts in the government, military, law enforcement, academic and policy research communities and from private enterprise. Appendix F lists the number of questionnaires submitted to each professional community with the number of responses received for coding.

Procedures for the development of the threat questionnaire had the following objectives:

1. Obtain expert perceptions concerning the threat a terrorist incident represents to United States national security interests, relative to the threat represented by other incidents in a sample of twenty-nine past terrorist events;
2. Take full advantage of the experts' experience and perceptions by providing only very general and vague concepts of threat and the national security interest.

The questionnaire was limited to one page of instructions and provided the respondent with a set of five-by-seven cards describing the incidents, as stated in Appendix B, and a post card on which to record the ordinal ranking of the events. The cards were used to facilitate the respondents ordering and re-ordering the incidents until satisfied with the ranking. The post card allowed the respondent to remain anonymous, if so desired, or to obtain a copy of the questionnaire results by including his return address on the post card.

The sample size of twenty-nine incidents was determined to be too large a sample to ask a judge to rank without expending more time and

effort than it was reasonable to ask of expert professionals who have many demands on their time. Accordingly, the sample was divided into two representative samples, each with three common incidents. A sample size of sixteen was determined to be a reasonable number to ask an expert to rank by threat. The three common points on the two scales permitted joining the two with a linear transformation and thus obtaining a scale of all twenty-nine incidents. A linear transformation was utilized, based on the two points out of the three common points with the least variance across the complete set of scales. Appendix G is a copy of the specific questionnaire which was mailed to expert judges.

Individual scales were developed to represent the consensus of the experts in each community and two scales to represent the overall consensus. Two procedures were utilized to develop two different overall scales. One procedure involved combining all the responses and developing a scale in the same manner as each individual scale was developed. The other procedure involved utilizing the individual scales developed for each community and calculating a mean scale value for each incident. The first procedure gave more weight to the community with the greatest number of responses and with the greatest internal consensus regarding their threat perceptions. The second procedure equally weights each individual community's scale in developing the overall scale. Appendix H contains the procedures by which the threat scales were developed from the raw data submitted by expert respondents. It also contains the ordinal raw data judgments submitted by expert respondents and the conversion process used to transform the data to an interval scale.

Upon completion of the scale development process with the solution of the network of simultaneous equations, two scales (one for each set of incidents) had been produced for each separate community and for the

overall scale. It was necessary to combine the two scales of sixteen incidents for each community and the overall scale into one scale for all twenty-nine incidents. As stated earlier, each scale had three common points, the two points with the smallest variance over the complete population of the scale were chosen to develop a linear transformation. The scale developed from the smallest number of respondents was transformed onto the scale with the largest number of respondents. The following points were in common on all scales:

1. Incident number 50 dated 20 May 1969 variance = 0.07378
2. Incident number 68 dated 4 September 1969 variance = 0.24385
3. Incident number 336 dated 27 January 1973 variance = 0.25921

Incidents 50 and 68 were chosen as the common points and the linear transformation was established to combine the scales as listed in Table VI.

Table VI.
Linear Transformations Used To Combine Interval Scales

Government	$Y = 1.08X - .627$
Military	$Y = .692X + 1.19$
Law Enforcement	$Y = .426X + .09$
Private Enterprise	$Y = .615X + .431$
Academia	$Y = .362X + .05$
Policy Research	$Y = .945X + .44$
Overall	$Y = .92X - .05$

To render the scales easier for visual inspection, the origin was moved to 1.0 by adding the smallest value plus 1.0 to all the scale values within each scale. This also placed each scale on the same origin, again making visual inspection easier, with the lowest event score set at a value of 1.0.

Threat perceptions for the overall scale, the government scale, the military scale and the private enterprise scale are presented below. The

four most threatening and the four least threatening incidents are reported for each scale. Each incident has been assigned an interval level numerical value indicating the threat it was perceived to represent. These values are transformations of the raw scale values developed in the scaling process. The transformation is linear as it conforms to the $Y = AX + B$ formula. This linear transformation was developed based upon the same two points for each scale. One point is from each of the two middle quartiles and has the smallest variance in the quartile. This type of transformation was made to provide scale values composed of whole numbers to facilitate visual comparison and to allow the extremes of the scales to fully represent the range of the perceptions of the experts.

The four most threatening and four least threatening incidents on each threat scale are described briefly and followed by their scale value. A more complete description of each incident is available in Appendix B.

1. Threat Scores -- All Experts Combined:

- (a) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 61;
- (b) #161 Hijacking Three Airliners, Jordan, 1970 -- 59;
- (c) #102 Kidnapping U.S. Labor Attache, Guatemala, 1970 -- 56;
- (d) #2 Killing U.S. Military Group Commander, Guatemala, 1968 -- 56;
- (e) #517 Bombing, Manchester, 1974 -- 24;
- (f) #350 Bombing Dance Hall, Glasgow, 1973 -- 23;
- (g) #112 Hijacking Airliner, Japan, 1970 -- 21; and
- (h) #487 Bank Robbery, London, 1974 -- 19.

2. Threat Scores -- Government Sample:

- (a) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 69;
- (b) #161 Hijacking Three Airliners, Jordan, 1970 -- 64;
- (c) #102 Kidnapping U.S. Labor Attache, Guatemala, 1970 -- 62;
- (d) #329 Kidnapping U.S. Ambassador, Haiti, 1973 -- 61;
- (e) #516 Attempted Airliner Hijacking, Japan, 1974 -- 31;
- (f) #350 Bombing Dance Hall, Glasgow, 1973 -- 27;
- (g) #517 Bombing, Manchester, 1974 -- 23; and
- (h) #50 Attempted Bombing Cuban Consulate, Montreal, 1969 -- 20.

3. Threat Scores -- Military Experts:

- (a) #2 Killing U.S. Military Group Commander, Guatemala, 1968 -- 58;
- (b) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 56;
- (c) #56 Damage to GM Plant, Uruguay, 1969 -- 51;
- (d) #161 Hijacking Three Airliners, Jordan, 1970 -- 50;
- (e) #517 Bombing, Manchester, 1974 -- 28;
- (f) #350 Bombing Dance Hall, Glasgow, 1973 -- 27;
- (g) #487 Bank Robbery, London, 1974 -- 19; and
- (h) #13 Bombing Australian Tourist Office, New York, 1968 -- 13.

4. Threat Scores -- Private Enterprise Experts:

- (a) #61 Hijacking Three Airliners, Jordan, 1970 -- 64;
- (b) #68 Kidnapping U.S. Ambassador, Brazil, 1969 -- 63;
- (c) #439 Capture of Terrorist With Anti-Air Missiles, Rome, 1973 -- 56;
- (d) #329 Kidnapping, U.S. Ambassador, Haiti, 1973 -- 56;
- (e) #374 Bombing Italian Consulate, Athens, 1973 -- 23;
- (f) #349 Bombing, London, 1973 -- 19;
- (g) #517 Bombing, Manchester, 1974 -- 19; and
- (h) #350 Bombing Dance Hall, Glasgow, 1973 -- 11.

5. The four incidents with the largest variance of scores across all the scales were the incidents where the greatest diversity of threat perceptions were reported. Each incident is briefly described, followed by the variance for the scores for that incident:

- (a) #374 Bombing Italian Consulate Car, Athens, 1973 -- 71;
- (b) #350 Bombing Dance Hall, Glasgow, 1973 -- 61;
- (c) #349 Bombing, London, 1973 -- 57; and
- (d) #112 Hijacking Airliner, Japan, 1970 -- 55.

6. The four incidents with the smallest variance of scores were those where the greatest consensus of perceptions of threat was reported. The incidents are briefly described, followed by the variance of all the scores for that incident:

- (a) #239 Jordanian Ambassador Attempted Assassination, London, 1971 -- 42;
- (b) #470 Bombing, London, 1973 -- 42;
- (c) #250 Bombing, Aldershot, England, 1972 -- 43; and
- (d) #56 Damage to GM Plant, Uruguay, 1969 -- 43.

Appendix I contains the complete raw data results of all dependent and independent variables developed by the researchers. The data contained in the Appendix was the base for further statistical analysis discussed in the following two chapters.

III. DATA ANALYSIS

A. GENERAL

Having selected the independent variable from the ITERATE file and having scaled the independent variables developed through content analysis, it was possible to begin the statistical analysis of the data. The scaling procedures and variables selected from the ITERATE file resulted in all interval or ratio level data, and thus it was possible to utilize the strongest forms of data analysis.

The final objective of the data analysis was to develop a multiple regression equation which explains a significant portion of the variance in the dependent variables.

B. DATA DISTRIBUTION AND TRANSFORMATIONS

The raw frequencies of all the independent variables (with the exception of the two variables obtained by qualitative content analysis) were sufficiently skewed that the data required transformation to conform to the assumptions of normal distribution and linearity. The data was transformed as follows:

1. $\text{LOG}_{10}(X + 1)$ and $\text{LOG}_{10}(X + 2)$ was applied to highly right skewed distributions; and
 2. Square Root was applied to moderately right skewed distributions.
- Table VII is the transformation applied to each of the independent variables and the correlation between the raw and transformed variables.

Table VII. Independent Variable Data Transformation

<u>VARIABLE</u>	<u>TRANSFORMATION</u>	<u>TRANSFORMED CORRELATION WITH RAW DATA</u>
NUMGRPS	LG 10 + 2	1.00
NUMTER	LG 10 + 2	.99
NUVICNAT	SQ RT	.99
NUMHOST	LG 10 + 2	.06
NUMGOV	LG 10 + 2	.99
NUENTS	LG 10 + 2	.99
KILLDOM	LG 10 + 2	.99
KILLFOR	SQ RT	1.0
LENGTH	LG 10 + 2	- .06
LINESPRI	LG 10	.85
LINESAFT	LG 10	.64
TOTALLINES	LG 10	.66
CNTRYLIN	LG 10	.66
FBISDATE	LG 10	.77
ARTCLS	LG 10	.77
ATOMICANA	N/A	N/A
ATOMICSTN	LG 10	.81
DRCTNANA	N/A	N/A
DRCTNST	LG 10	.79

C. VARIABLE SELECTION

After the correlation between the raw and the transformed variables, a determination was made concerning the validity of using the transformed variable for further analysis. A highly positive correlation indicated that the results of further analysis would not be adversely affected by the transformation. Low positive or negative correlations indicated the possibility of inconsistencies in the future analysis, resulting from the utilization of the transformed variables. This aspect was considered in selecting variables for further analysis.

The problem of missing data was also addressed. Those variables in which significant proportions of missing data existed were identified and a determination made if the missing data could be acquired or if the variable must be removed from further analysis. Through additional research

it was possible to determine the number of terrorists involved in all the sample incidents. This data was obtained from FBIS, New York Times, London Times and the Los Angeles Times.

For content analysis variables, a mean score was determined to be a valid event score and was utilized for those incidents having no terrorist statement during the required time period in either the FBIS Daily Report or the New York Times.

As a result of this phase of the data analysis, several variables were excluded from further analysis. Table VIII lists those variables excluded from further analysis.

Table VIII. Excluded Variables

<u>VARIABLE NAME</u>	<u>EXCLUSION RATIONALE</u>
Number of Male Terrorists	Too few cases (15)
Number of Female Terrorists	Too few cases (17)
Mean Age of Group Members	Too few cases (1)
Age Range of Group Members	Too few cases (8)
Number of Prisoners' Release Demanded	Too few cases (38)
Number of Prisoners Released	Too few cases (41)
Length of Terrorist Event	Mal-Distributed data and very low correlation between raw and transformed data

D. FACTOR ANALYSIS

Factor analysis was conducted prior to subjecting the variables to multiple regression analysis. Factoring was conducted for the purposes of parsimony and to preclude multicollinearity. It was necessary to reduce the number of variables for the final phases of the analysis while retaining the essential nature of the factors represented by the combination of the variables loading together on the factor. Factoring was conducted in several stages: first the variables developed from the ITERATE

file were factored, utilizing all 214 cases in the universe of analysis. The next stage involved factoring the independent variables from the ITERATE file, using the 29 cases from the random sample under study. These two stages identified the factors and validated the loadings achieved in the sample with the loading achieved in the universe of analysis. Finally, all independent variables were factored together, the results of which are shown in Table IX.

Factoring was conducted with the Statistical Package for the Social Sciences program for orthogonal rotated factoring. The number of factors for the final rotation was pre-established as four, based upon the emergence of four factors during previous factorings.

Table IX. Results of Factor Analysis With Significant Factor Loadings

<u>VARIABLES</u>	<u>FACTOR ONE</u>	<u>FACTOR TWO</u>	<u>FACTOR THREE</u>	<u>FACTOR FOUR</u>
FBIS Lines After	.84			
Total FBIS Lines	.93			
Total Country Lines	.86			
FBIS Dates	.93			
FBIS Articles	.91			
Atomic Statements	.57			
Directional Statements	.58			
Number of Hostages		.71		
Number of Governments		.77		
Number of Entities		.96		
Atomic Analysis			.97	
Directional Analysis			.87	
Number of Terrorist Groups				.73

E. FINAL INDEPENDENT VARIABLES

Based upon the results of Table IX factoring, the following factors were identified and representative variables selected for further analysis:

1. Factor One incorporated six separate variables obtained through quantitative content analysis methods of extracting data from FBIS. Total Number of FBIS Lines Per Event, Number of Country Lines Per Event, Number

of FBIS Daily Report Issue Dates Per Event, Number of FBIS Articles Per Event and Number of Expanded Directional and Atomic Assertion Statements Per Event all loaded on one factor and are highly correlated with one another. FBIS Daily Report Issue Dates loaded highest within the group of variables and was selected as the variable to represent FBIS quantitative content.

2. Factor Two involved the extent of the demands made by terrorists during a terrorist incident. This factor was statistically comprised of the number of governments upon whom demands were made by the terrorists, the number of separate international entities upon whom demands were made during a terrorist incident, and the number of hostages taken during the incident. The factor represented a measure of the direct international involvement of legitimate international actors as a consequence of a terrorist incident. The number of separate international entities upon whom demands were made in a terrorist incident was used as a representative variable for this factor in multiple regression analysis.

3. Factor Three comprised the two qualitative content variables, Atomic Assertion and Expanded Directional Analysis loaded together and separate from other factored independent variables. In view of the higher loading factor, more thorough methods of insuring reliability, and higher bivariate correlation, Atomic Assertion Analysis was selected to represent the terrorist group's perceived saliency of enemy threat.

4. Factor Four involved the degree of cooperation between terrorist groups associated with a terrorist incident. This factor was comprised of one variable: The Number of Terrorist Groups Involved In A Terrorist Incident.

The following important variables did not load significantly on any of the factors but were considered to be key variables in the explanation of experts' perceptions of terrorist threat:

1. FBIS Lines Prior To The Terrorist Incident
2. Number of Terrorists Involved In The Incident
3. Number of Victims' Nationalities
4. Number of Domestic Non-Combatants Killed
5. Number of Foreign Non-Combatants Killed

All of the above variables were retained for further analysis except the Number of Victims' Nationalities, which was eliminated from further analysis due to the high correlation with the key variable, Number of Terrorists. The variable Number of Terrorists was considered more important for further analysis and was retained in lieu of Number of Victims' Nationalities, based upon its potential as a predictor of the future threat which a terrorist group may represent.

F. MULTIPLE REGRESSION ANALYSIS

1. General

Multiple regression analysis was conducted primarily as a descriptive tool. The objective of the analysis was to determine what portion of the variance in the dependent variable was directly attributable to each of the independent variables; e.g., in one multiple regression equation, it was determined that the independent variable Number of Foreign Non-Combatants Killed explained fifteen per cent of the threat as perceived by the research community.

The multiple regression was conducted utilizing the regression sub-program of the Statistical Package For The Social Sciences.¹¹ The

¹¹Nie, Norman H., and others, Statistical Package For The Social Sciences, McGraw-Hill, 1970.

stepwise forward inclusion of variables was used to compute the multiple regression correlation of independent variables with the dependent variables.

2. Independent Variables

The multiple regression was conducted in two phases. Initially, the following independent variables were included in the regression equation:

- a. Number of FBIS Issue Dates Per Event
- b. Number of FBIS Lines Prior To Incident
- c. Atomic Content Analysis Scale
- d. Number of Foreign Non-Combatants Killed
- e. Number of Entities Upon Whom Demands Were Made
- f. Number of Terrorist Groups Participating In Incident
- g. Number of Terrorist Individuals Participating In Incident
- h. Number of Domestic Non-Combatants Killed

The above listed variables were developed during the data collection and had been factored in the initial phases of the data analysis in paragraph D above.

The second phase of the multiple regression analysis was conducted utilizing a series of nominal level dummy independent variables in addition to the independent variables used in the initial multiple regressions. This phase had the objective of determining which nominal level variables having some degree of implicit association with terrorist threat did in fact explain a significant portion of the variance in the dependent variables.

3. Selection of The Nominal Level Dummy Independent Variables

The ITERATE File contains a series of nominal level variables which all had some degree of implicit association with the threat represented by international terrorism. The nominal level independent variables were selected for analysis by multiple regression and were entered into the

regression analysis which was composed of the independent variables from the initial phase of the multiple regression analysis. The following variables were used as dummy variables having only two nominal states: "yes" or "no."

a. Geographical Location of The Incident

Five geographic locations were defined: Latin America, South America, North America, Europe and The Middle East. It was hypothesized that for geopolitical reasons, it was possible that perceptions of terrorist threat may be associated with the location in which the incident took place.

b. Terrorist Discriminate Selection of The Target

Discriminate target selection on the part of a terrorist group indicated an ability to plan and execute a more extensive type of operation than is necessary to attack a target of opportunity. It was hypothesized that this added degree of operational capability was associated with perception of greater threat for terrorist incidents involving discriminate target selection.

c. United States Citizen Victims of The Terrorist Incident

Due to the greater overall impact associated with attacks on United States citizens by terrorists, it was hypothesized that such incidents may have been perceived as having greater threat to the United States national security objectives.

d. Terrorist Incident Involving Attack on Official United States Installation

It was hypothesized that the physical and psychological impact of a terrorist attack on an official United States installation would result in an increase of the threat perceptions for this type incident.

e. Terrorist Group Identified As Fedayeen

It was hypothesized that the fanatical image surrounding the Fedayeen terrorist groups would contribute to the perception of threat associated with terrorist incidents involving Fedayeen groups.

4. Multiple Regression Correlation Results

The complete results of the regression analysis conducted in both phases of the analysis are contained in Appendix K, which is a summary of multiple regression (R^2 increase associated with each of ITERATE and Content Analysis independent variables in the regression equation), and Appendix L, a summary of multiple regression (R^2 increase associated with the inclusion of the nominal level independent variables in the regression equation). The most significant results of both phases of regression are displayed in the Tables X through XIV.

Tables X and XI contain the results of the regression conducted during the first phase, with the dependent variables representing the overall threat perceptions of all the experts and the average threat perception for all the communities involved.

Table X.
Regression of The Dependent Variable "Overall Threat"
With The Initial Interval Level Independent Variables

<u>INDEPENDENT VARIABLES</u>	<u>R²</u>	<u>B</u>	<u>95% CONFIDENCE INTERVAL</u>	<u>LEVEL OF SIGNIFICANCE</u>
Number of FBIS Issue Dates	.39	.77	.117 < B < 1.42	.005
Number of Terrorist Groups	.008	1.16	-1.9 < B < 4.2	More Than .1
Number of Foreign Non- Combatants Killed	.02	.17	- .36 < B < .69	"
Number of Terrorists	.004	.18	- .9 < B < 1.28	"
Number of FBIS Lines Prior	.002	-.04	- .3 < B < .228	"
Number of Domestic Non- Combatants Killed	.0008	-.12	-1.4 < B < 1.14	"
Atomic Content Analysis Sc1	.0005	.006	- .08 < B < .09	"
TOTAL42			
Constant		.87751		
Overall Level of Significance	0.05			

Table XI.
Regression of The Dependent Variable "Average Threat"
With The Initial Interval Level Independent Variable

<u>INDEPENDENT VARIABLES</u>	<u>R²</u>	<u>B</u>	<u>95% CONFIDENCE INTERVAL</u>	<u>LEVEL OF SIGNIFICANCE</u>
Number of FBIS Dates	.32	.41	0 < B < .8	.005
Number of Foreign Non- Combatants Killed	.1	.36	0 < B < .74	.01
Atomic Content Analysis Sc1	.04	.05	-.04 < B < .13	More Than .5
Number of Entities Demands Made Upon	.02	.09	-.17 < B < .4	"
Number of FBIS Lines Prior To Event	.008	.05	-.14 < B < .23	"
Number of Terrorist Groups	.005	-.47	-1.6 < B < 1.6	"
Number of Domestic Non- Combatants Killed	<u>.002</u>	<u>-.117</u>	<u>-1.3 < B < .74</u>	"
TOTAL484			
Constant		1.9		
Overall Level of Significance	.025			

Tables XII and XIII contain the results of the regression analysis conducted with the same dependent variable in the second phases of the analysis. The tables show the results of the addition of the independent variables indicating that United States citizens were involved as victims in the terrorist incident.

All of the tables X through XIII follow the same format: the percentage of the variance explained by each independent variable is indicated (R^2); the regression coefficient for each variable is indicated (B); the range of the 95% confidence interval calculated on a T distribution is indicated; and the significance level obtained from an F test is presented.

Table XII.
Regression of The Dependent Variable "Overall Threat"
With The Initial Variables And The Nominal Level
Indepndnet Variable Indicating If A United States
Citizen Was Victim In The Terrorist Incident

INDEPENDENT VARIABLES	<u>R²</u>	<u>B</u>	95% CONFIDENCE INTERVAL	LEVEL OF SIGNIFICANCE
US Citizen Victims	.45	.7	1.12 > B > .27	.005
Number of FBIS Issue Dates	.17	.8	.2 < B < 1.45	.005
Number of FBIS Lines Prior	.01	-.13	- .39 < B < .13	.05
Number of Entities Demands Made Upon	.01	-.17	- .57 < B < .24	More Than .05
Number of Foreign Non- Combatants Killed	.004	-.19	- .77 < B < .4	"
Number of Terrorist Groups	.005	-.74	-3.8 < B < 2.4	"
Atomic Content Analysis Sc1	.005	.02	- .07 < B < .1	"
Number of Terrorists	.003	-.2	-1.3 < B < .88	"
Number of Domestic Non- Combatants Killed	.0005	.09	-1.0 < B < 1.3	"
TOTAL67			
Constant		3.2		
Overall Level of Significance 0.25				

Table XIII.
Regression of The Dependent Variable "Average Threat" With The Initial
Interval Level Independent Variables And The Nominal Level Variable
Indicating If A United States Citizen Was Victim of The Terrorist Incident

INDEPENDENT VARIABLES	<u>R²</u>	<u>B</u>	95% CONFIDENCE INTERVAL	LEVEL OF SIGNIFICANCE
Number of FBIS Issue Dates	.36	.2	- .13 < B < .55	.025
US Citizen Victims	.11	.4	.6 > B > .17	.005
Number of Terrorist Groups	.14	-2.9	-4.94 < B < -.9	.005
Atomic Content Analysis Sc1	.08	.06	- .12 < B < -.007	.025
Number of Entities Demands Made Upon	.05	.3	- .04 < B < .64	.005
Number of Terrorists	.06	-.6	-1.2 < B < .07	.025
Number of Foreign Non- Combatants Killed	.007	.12	- .19 < B < .43	More Than .5
Number of FBIS Lines Prior To Event	.001	.02	- .12 < B < .17	"
Number of Domestic Non- Combatants Killed	.0004	-.06	- .72 < B < .59	"
TOTAL82			
Constant		4.62		
Overall Level of Significance Less Than .005				

Table XIV presents the results of one of the more significant multiple regression analyses found. This regression is of the dependent variable representing the threat perceptions of government experts and includes the independent variable indicating if an official United States installation was the target of the terrorist incident.

Table XIV

Regression of The Dependent Variable "Government Threat" With The Initial Independent Variables And The Nominal Level Variable United States Official Installation Involved As A Target In The Terrorist Incident

<u>INDEPENDENT VARIABLES</u>	<u>R²</u>	<u>B</u>	<u>95% CONFIDENCE INTERVAL</u>	<u>LEVEL OF SIGNIFICANCE</u>
Number of FBIS Issue Dates	.260	.70	-0.08 < B < 1.50	.025
US Official Installation	.160	.95	0.18 < B < 1.70	.005
Atomic Content Analysis	.040	.06	-0.04 < B < 0.17	.250
Number of Terrorists	.013	.53	-0.80 < B < 1.87	More Than .5
Number of Foreign Non- Combatants Killed	.011	.23	-0.40 < B < 0.87	" " "
Number of Terrorist Groups	.002	.43	-3.28 < B < 4.14	" " "
Number of FBIS Lines Prior	.001	.03	-0.29 < B < 0.35	" " "
TOTAL	.48			
CONSTANT		2.80		
Level of Significance of The Overall Regression Equation .05				

5. Multiple Regression Correlation Findings.

Based on the results of the multiple regression correlations the following conclusions were derived concerning the significance of the various independent variables and the amount of the variance in the dependent variable which the independent variables explained:

a. The variable FBIS Daily Report Issues Per Terrorist Event explained more of the variance in the dependent variables than any of the other independent variables developed through content analysis. It was the only content analysis-associated independent variable that was statistically significant in the regression analysis equation.

b. The independent variables indicating the FBIS Lines Prior to

a terrorist incident and the variable developed with the atomic content analysis methodology were not significant in explaining any of the variance of the dependent variables in the regression equations.

c. The independent variable Number of Terrorists Involved in the incident, was used as the representative variable for the factor associated with the total human involvement in the terrorist incident. This variable explained more of the variance in the dependent variables than any of the other interval level variables from the ITERATE file.

d. The independent variable representing the Number of Foreign Non-Combatants Killed in the terrorist incident was significant in the explanation of the variance of the dependent variable Academic Threat Perceptions.

e. The independent variables Number Of Terrorist Groups, Number Of Entities Upon Whom Terrorist Demands Were Made, and Number Of Domestic Non-Combatants Killed were not significant in explaining any of the variance in the dependent variables.

f. The nominal level variable indicating that a U.S. Citizen Was The Victim in the terrorist incident explained the largest percentage of the variance in the dependent variables Overall Threat, Government Threat, Military Threat, Private Enterprise Threat and Law Enforcement Threat.

g. The variable indicating that the Terrorist Target Was Selectively Chosen was significant in explaining the variance in the dependent variables Government, Law Enforcement, Research, Overall and Average Threat.

h. The nominal level variable indicating that an Official U.S. Installation Was Involved As A Target in the terrorist incident was

significant in explaining the variance in one dependent variable:

Government Threat.

i. The variable indicating the terrorists were identified as Fedayeen was not significant in explaining the variance in any of the dependent variables.

j. No specific geographic location for the occurrence of terrorist incidents was significant in explaining the variance in any of the dependent variables.

6. Summary of Multiple Regression Analysis Findings

The combination of variables which were statistically most significant in explaining the variance of each dependent variable is presented below. The independent variables were significant at the .05 level or better and were arranged in order of decreasing significance.

- a. The Overall, Military and Private Enterprise Threat variables' variance were best explained by the combination of the independent variables U.S. Citizen Victims and FBIS Issue Dates.
- b. The Government Threat variable's variance was best explained by the independent variables Official U.S. Installation Being The Target of The Incident and FBIS Issue Dates.
- c. The Law Enforcement Threat variable's variance was best explained by the combination of Selective Target Chosen By The Terrorists and Number of FBIS Issue Dates.
- d. None of the independent variables were significant in the explanation of the variance in the Academic and Research Threat variables.
- e. The Average Threat variable's variance was best explained by the combination of the following independent variables: United States Citizens Victim, FBIS Issue Dates and Number of Foreign Non-Combatants Killed.

Table XV contains the standardized regression coefficients (Betas) for each of the independent variables. The Betas for the independent variables utilized in the first phases of the regression were obtained as a result of entering all these variables into the regression analysis. The Betas for the nominal level variables utilized in the second phases of the regression analysis were obtained when these variables were entered into the analysis one at a time with the variables from the first phase.

Table XV.

Table of Standardized Regression Coefficients (Beta)

Unless otherwise indicated, the Betas are significant at the .05 level or higher. Less significant Betas are included when the specific multiple regression did not result in a higher level of significance. The less significant Betas are provided to indicate the variable that is responsible for most of the change in the variance of the dependent variable.

INDEPENDENT VARIABLES	DEPENDENT VARIABLES							
	<u>OVRL</u>	<u>GOV</u>	<u>MIL</u>	<u>BUS</u>	<u>LAW</u>	<u>ACADEMIA</u>	<u>RSRCH</u>	<u>AVERAGE</u>
Number of FBIS								
Issue Dates	.56			.21**	.55			.42
Number of Foreign								
Non-Combatants								
Killed						.35*	.35	.36
Number of								
Terrorists	.25**	.26**			-.36			
US Citizen Victim.	.63	.60	.76	.52	.69			.51
Discriminate								
Target Selection.	.37	.34			.72			.47
US Official								
Installation								
Target		.43	.43					
** .25 Level of Significance * .10 Level of Significance								

The Betas represent regression coefficients where the unit of measurement has been standardized for all variables. It is thus possible to directly compare the Betas for the purpose of evaluating the contribution which each variable makes to the relative change of the variance of the dependent variable.

From Table XV we can conclude the following:

a. The independent variable, U.S. Citizen Victim Of The Incident caused the largest and most significant change in the threat perceptions of all the experts as represented in both the Overall and the Average scales, and in the perceptions of threat held by the experts in the Government, Military and Business communities. It made a significant

relative change in the threat perceptions of the Law Enforcement experts.

b. The independent variable Discriminate Target Selection by the terrorists was the most significant and caused the largest change in the perceptions of threat held by the Law Enforcement experts. It made a smaller but still significant change in the perception of all the experts and in the separate perceptions of Government and Military experts.

c. The independent variable U.S. Official Installation Attacked made a significant relative change in the threat perceptions of the Government and the Military experts.

d. The independent variable Number of FBIS Issue Dates devoted to the terrorist incident made a highly significant and large change to the threat perceptions of all the experts as expressed in both the Overall and the Average scales. It also made a significant relative change in the perceptions of the Law Enforcement experts.

e. The independent variable Number of Foreign Non-Combatants Killed was the only variable which made a noteworthy relative change to the threat perceptions of the Academic and Policy Research experts; it was also a significant variable in explaining the change in the threat perceptions of all the experts as expressed in the Average threat scale.

f. The independent variable Number of Terrorists Involved made a significant negative change in the threat perceptions of the Law Enforcement experts.

7. Time Series Analysis

In determining to what extent the threat perceptions of the experts concerning terrorism were related to time, it was recognized that perceptions of increasing threat over time would have a significant impact on the overall analysis. It was necessary to analyze the correlation between the threat and time. Time was computed by setting the first month of the period of analysis equal to one and the last month equal to eighty-four. The time series analysis was conducted utilizing Pearson product moment. The results of this correlation are presented in Table XVI. Table XVI presents the percentage of the variance in threat perception associated with time (R^2) and the significance level for each R^2 .

Table XVI. Results of Time Series Analysis

<u>DEPENDENT VARIABLE</u>	<u>R^2</u>	<u>SIGNIFICANCE LEVEL</u>
Overall Threat	.25990	.00236
Average Threat	.13863	.02335
Government Threat	.12616	.02933
Research Threat	.02194	.22159
Military Threat	.09233	.05472
Academia Threat	.00112	.43169
Law Enforcement	.24200	.00336
Private Enterprise	.14979	.01903

Based on the results shown in Table XVI, it is possible to conclude that there is no linear correlation to indicate that the experts' perceptions of terrorist threat are changing as a function of time.

IV. CONCLUSIONS

A. THREAT PERCEPTIONS

The methodology employed to: (a) survey experts concerning their perceptions of terrorist threat, and (b) transform their ordinal judgments into an interval scale, provided a measurement of the threat of terrorist incidents, which proved to be valid and useful means of correlating threat with other aspects of terrorist incidents. The threat perceptions of those experts representing the various communities directly involved in combating terrorism (e.g., government and law enforcement) were highly correlated with each other. However, the threat perceptions of those experts studying terrorism and conducting policy research relative to terrorism were significantly different from the perceptions of the experts directly involved in combating terrorism. The combination of the threat perceptions of all the experts into either an overall or an average threat scale resulted in a scale which correlated highly with the perceptions of those experts involved in directly combating terrorism. The combined scales did not correlate with the perceptions of those experts doing research and studying terrorism.

B. ITERATE VARIABLES

The aspects of terrorist incidents drawn from the ITERATE File related generally to the method of operation of the terrorist group. Two sub-sets of aspects existed in these variables: (a) those aspects which were generally accepted and relatively obvious contributors to the threat perceptions associated with a terrorist incident (e.g., U.S. citizens as the victim of the incident), and (b) those aspects which were less obvious contributors to the threat associated with a terrorist incident (e.g., the number of terrorists involved in the

incident). Variables from both of these aspects of terrorist methods of operation proved to be significant contributors to the threat associated with a terrorist incident.

C. CONTENT ANALYSIS

The qualitative content analysis methodologies used to determine the terrorist group's perceived saliency of its enemy produced interval scales which did not correlate highly with any of the dependent perceived threat variables derived from experts, nor did it contribute to explaining a significant degree of variance in the regression equation. Accordingly, the study indicated that the perceived saliency of a terrorist group's enemy is not a primary or significant threat to U.S. national security as perceived by expert respondents.

The quantitative content analysis methodology of lines in FBIS relating to indicators of the terrorist event prior to the initiation of the incident was developed as a possible predictor of terrorist activity. The independent variable of FBIS lines prior to an event did not correlate significantly with any of the dependent variables, nor did it contribute to explaining a significant degree of the variance in the regression equation. Accordingly, the study indicated that FBIS content prior to a terrorist event is not an indicator of threat to U.S. national security as perceived by expert respondents.

As indicated in factor analysis, several quantitative content analysis variables loaded together around FBIS Daily Report Issues and were a representative factor variable for FBIS content in general. FBIS content had the highest R^2 of all independent variables with a Beta of .77 at a .005 significance level in the regression equation. Also, FBIS content contributed most to the relative change in all the dependent variables during regression analysis and was significant in explaining most of the variance for all dependent variables. Accordingly, the study

indicated that FBIS content is directly related to the perception of U.S. national security as perceived by expert respondents.

D. ALTERNATE SOLUTIONS

The ITERATE File was found to be the broadest based available data source for the study of international terrorism. Based on the findings of this study, the following comments are provided for improving the utility of the ITERATE data file:

1. Increase the source documents used for data collection, including FBIS Daily Report issues, The Los Angeles Times and The London Times.
2. Incorporate a set of variables to measure and represent the cultural and ethnic traditions and constraints felt by the terrorist group which could influence its methods of operation.
3. Incorporate a set of variables to measure and represent the linkages which exist between the terrorist group involved in the terrorist incident and other terrorist groups.
4. Incorporate a set of variables to measure and represent the linkages existing between a terrorist group involved in a terrorist incident and other international actors.
5. Incorporate a set of variables that measure and represent a terrorist group's demands, patterns and negotiating behavior.
6. Incorporate a set of variables that represent the results of content analysis of terrorist statements.

Further refinement and updating of information in the ITERATE File could contribute significantly to statistical evaluation and analysis of terrorist activity and operational patterns of terrorist groups. Presently missing data which is available in open source literature would contribute greatly to the excellent statistical data file contained in the ITERATE File.

Two specific recommendations are submitted for future research dedicated to scaling expert respondent results:

1. Develop a more sophisticated consensus model for integrating the opinions of experts in the various communities into a scale to represent the overall threat perceptions of high-level decision makers.

2. Develop a feedback mechanism which would permit updating of threat scales based upon changing national security objectives relative to the international situation and the emergence of varying types of terrorist methods.

As can be determined by a review of FBIS content raw data, certain terrorist events in certain countries are covered thoroughly, whereas other events in different countries have little or no FBIS coverage. An in-depth study of terrorist activity coverage in FBIS by country may be profitable in the reallocation of resources for the publication of FBIS Daily Report issues.

Finally, a further analysis of classified files using Atomic Assertion Content Analysis methodology for scoring terrorist statements in relation to perceived enemy threat may reveal causative effects and/or correlation with significant prediction indicators of terrorist activity.

APPENDIX A

DIMENSIONS OF SALIENCY OF ENEMY PERCEPTIONS

1. Highly Salient Active Threat -- the enemy is perceived as engaging in activity immediately threatening, hostile to the group's interests and requiring attention activity by the group.

2. Highly Salient Strong Threat -- the enemy is considered to have potential or actual capabilities of taking direct or indirect actions which adversely affect the group, with a high probability of success, unless action is taken to check, equal or surpass his power.

3. Highly Salient Proximate Threat -- the enemy is perceived as close in time, space and meaning and there is considerable involvement, interaction or conflict with him.

4. Highly Salient Ego-Relevant -- the central elements of the group's self-image (i.e., stands, beliefs, responses or attitudes) are affected or influenced by the enemy or the enemy's perceived presence.

5. Low Salient Passive Threat -- the enemy is less threatening, less engaged in activity which is immediately hostile and less demanding of the group's attention.

6. Low Salient Weak Threat -- the enemy is not perceived as having sufficient power to take successful actions against the group, requiring only a monitoring effort of the enemy's activities and minimizing his chance for future gains at the group's expense.

7. Low Salient Distant Threat -- the enemy is perceived as being remote in time, space and meaning with little likelihood of perceived confrontation.

8. Low Salient Ego-Irrelevant -- the enemy does not have a great impact on the group's behavior, attitudes or actions.

APPENDIX B

DESCRIPTIVES OF TERRORIST EVENTS

EVENT #2 THE RAND CHRONOLOGY

EVENT DATED 16 JANUARY 1968, GUATEMALA

GUNMEN IN A PASSING CAR SHOT TO DEATH COLONEL JOHN D. WEBBER, COMMANDER OF THE 34-MAN U.S. MILITARY GROUP IN GUATEMALA AND LIEUTENANT COMMANDER ERNEST A. MUNRO, HEAD OF THE MILITARY GROUP'S NAVY SECTION, AS THEY WERE RETURNING FROM LUNCH. TWO ENLISTED MEN WERE WOUNDED IN THE ATTACK. THE FOLLOWING DAY THE REVOLUTIONARY ARMED FORCES (FAR) DISTRIBUTED LEAFLETS STATING THAT IT HAD EXECUTED THE TWO U.S. OFFICIALS BECAUSE GUATEMALAN MILITARY GROUPS "CREATED BY AMERICAN ORDERS" HAD KILLED THOUSANDS OF GUATEMALANS. THE KILLING OF WEBBER AND MUNRO WAS ALSO REPORTED TO BE IN REVENGE FOR THE DEATH OF ROGELIA CRUZ MARTINEZ, A FORMER "MISS GUATEMALA," WHO HAD BEEN BRUTALLY SLAIN BY LA MANO BLANCO, A RIGHT-WING TERRORIST GROUP, BECAUSE OF HER LEFTIST CONTACTS.

EVENT #13 THE RAND CHRONOLOGY

EVENT DATED 4 JULY 1968, UNITED STATES

THE AUSTRALIAN NATIONAL TOURIST OFFICE IN NEW YORK CITY WAS BOMBED BY EL PODER CUPANO, AN ANTI-CASTRO GROUP.

EVENT #31 THE RAND CHRONOLOGY

EVENT DATED 12 OCTOBER 1968, BRAZIL

MEMBERS OF THE VANGUARDA POPULAR REVOLUCIONAIRA (VPR) KILLED U.S. ARMY CAPTAIN CHARLES R. CHANDLER BY MACHINE GUN FIRE IN FRONT OF HIS HOME IN SAO PAULO. ACCORDING TO U.S. OFFICIALS, CAPTAIN CHANDLER WAS STUDYING BRAZILIAN AND PORTUGUESE HISTORY AT THE UNIVERSITY OF SAO PAULO BEFORE TAKING A TEACHING ASSIGNMENT AT WEST POINT. LEAFLETS LEFT NEAR HIS BODY ACCUSED HIM OF BEING A "VIETNAMESE WAR CRIMINAL." LEFTISTS CLAIMED THAT HE HAD BEEN SENT TO BRAZIL TO ORGANIZE AND TRAIN RIGHT-WING TERRORIST GROUPS.

EVENT #50 THE RAND CHRONOLOGY

EVENT DATED 20 MAY 1969, CANADA

TWO CUBAN REFUGEES WERE ARRESTED IN NEW JERSEY AFTER THEY HAD ATTEMPTED TO BOMB THE CUBAN CONSULATE IN MONTREAL.

EVENT #56 THE RAND CHRONOLOGY

EVENT DATED 20 JUNE 1969, URUGUAY

TWO TUPAMARO TERRORISTS, DRESSED IN POLICE UNIFORMS, ATTACKED A FACILITY OF GENERAL MOTORS CORPORATION IN MONTEVIDEO, CAUSING DAMAGE ESTIMATED AT \$1 MILLION DOLLARS.

EVENT #68 THE RAND CHRONOLOGY

EVENT DATED 4 SEPTEMBER 1969, BRAZIL

IN RIO DE JANEIRO, MEMBERS OF THE MOVIMENTO REVOLUCIONARIO-8 (MR-8) AND ACTION FOR NATIONAL LIBERATION (ALN) KIDNAPPED CHARLES BURKE ELBRICK, U.S. AMBASSADOR TO BRAZIL. THE KIDNAPPERS TOOK ELBRICK FROM HIS CAR AND LEFT A RANSOM NOTE DEMANDING THE RELEASE OF 15 PRISONERS WHO WERE TO BE FLOWN TO ALGERIA, CHILE OR MEXICO, AND DEMANDING THE PUBLICATION OF AN ANTIGOVERNMENT MANIFESTO. THE KIDNAPPERS NEGOTIATED WITH THE GOVERNMENT BY NOTES.

THEIR DEMANDS PLACED A GREAT STRAIN ON THE BRAZILIAN GOVERNMENT, A MILITARY JUNTA THAT HAD ASSUMED POWER ONLY A FEW DAYS EARLIER WHEN THE PRESIDENT SUFFERED A STROKE. HARDLINERS WITHIN THE MILITARY WHO DID NOT WANT TO ACCEDE TO THE KIDNAPPERS' DEMANDS SPLIT WITH THOSE WHO WERE WILLING TO ACCEDE IN ORDER TO GAIN THE AMBASSADOR'S RELEASE. ON SEPT. 5, THE GOVERNMENT AGREED TO RELEASE THE PRISONERS AND AUTHORIZED BRAZILIAN NEWSPAPERS TO PUBLISH THE MANIFESTO. THE DEAL WAS ALMOST UPSET AT THE FINAL MOMENT WHEN PARATROOPERS IN RIO DE JANEIRO ATTEMPTED TO PREVENT THE PLANE CARRYING THE PRISONERS FROM TAKING OFF. THE PARATROOPERS WERE ORDERED BACK TO THEIR BARRACKS, HOWEVER, AND THE PLANE LEFT FOR MEXICO ON SEPT. 6. AMBASSADOR ELBRICK WAS RELEASED ON SEPT. 7.

FOLLOWING THE EPISODE, BRAZILIAN AUTHORITIES INITIATED A ROUND-UP OF LEFTIST SUSPECTS, ARRESTING AS MANY AS 4,000. THIS WAS THE FIRST OF THE DIPLOMATIC KIDNAPPINGS, A PRACTICE THAT SPREAD RAPIDLY THROUGHOUT LATIN AMERICA IN THE NEXT FEW YEARS.

EVENT #102 THE RAND CHRONOLOGY

EVENT DATED 6 MARCH 1970, GUATEMALA

MEMBERS OF THE REVOLUTIONARY ARMED FORCES (FAR) KIDNAPPED SEAN HOLLY, U.S. LABOR ATTACHE, AND DEMANDED THE RELEASE OF FOUR PRISONERS, HELD BY GUATEMALAN AUTHORITIES, IN RETURN FOR HOLLY'S RELEASE. THE GOVERNMENT, WHICH HAD FACED A SIMILAR INCIDENT WHEN ALBERTO FUENTES MOHR, GUATEMALAN FOREIGN MINISTER, WAS KIDNAPPED ON FEBRUARY 27, AGAIN AGREED TO MEET THE KIDNAPPERS' DEMANDS. TWO OF THE PRISONERS WERE TURNED OVER TO THE COSTA RICAN EMBASSY ON MARCH 7, BUT THE OTHER TWO COULD NOT BE LOCATED. ONE, WHO WAS NOT IN PRISON AS THE KIDNAPPERS BELIEVED, MADE HIS OWN WAY TO THE COSTA RICAN EMBASSY AND WAS GRANTED ASYLUM. THE FOURTH CONTACTED THE FAR FROM TAPACHULA, MEXICO, WHERE HE HAD BEEN STAYING. THE KIDNAPPERS RELEASED HOLLY ON MARCH 8.

EVENT #112 THE RAND CHRONOLOGY

EVENT DATED 31 MARCH 1970, JAPAN

NINE MEMBERS OF THE UNITED RED ARMY (URA) HIJACKED A JAPAN AIR LINES PLANE AND ORDERED IT FLOWN TO PYONGYANG, NORTH KOREA. IN AN ELABORATE RUSE, OFFICIALS DISGUISED SEOUL'S AIRPORT TO LOOK LIKE PYONGYANG'S AND THE PLANE LANDED IN SEOUL, BUT THE HIJACKERS WERE NOT FOOLED. THEY LET THE PASSENGERS DISEMBARK IN SEOUL, HOWEVER; THEN FLEW ON TO PYONGYANG.

EVENT #142 THE RAND CHRONOLOGY

EVENT DATED 22 JULY 1970, GREECE

SIX ARAB GUERRILLAS HIJACKED AN OLYMPIC AIRWAYS 727 AIRLINER OVER RHODES AFTER IT HAD TAKEN OFF FROM BEIRUT, AND ORDERED IT FLOWN TO CAIRO. THEY DEMANDED THE RELEASE OF SEVEN OTHER ARAB GUERRILLAS BEING HELD BY THE GREEK GOVERNMENT FOR THE ATTACK ON AN EL AL ISRAEL AIRLINES PLANE (DECEMBER 26, 1969), FOR AN ATTEMPTED HIJACKING OF A TWA AIRPLANE (DECEMBER 24, 1969), AND FOR AN ATTACK ON THE EL AL ISRAEL AIRLINES OFFICE IN ATHENS (NOVEMBER 27, 1969).

WITH THE INTERNATIONAL RED CROSS ACTING AS INTERMEDIARY, THE GREEK GOVERNMENT PROMISED TO RELEASE THE PRISONERS WITHIN ONE MONTH, AND THE 55 PASSENGERS AND CREW OF THE OLYMPIC AIRWAYS PLANE WERE RELEASED. THE PALESTINIAN POPULAR STRUGGLE FRONT CLAIMED CREDIT FOR THE OPERATION. OFFICIALS IN CAIRO WELCOMED THE SIX HIJACKERS AND PRAISED THEIR DETERMINATION TO FREE THEIR COLLEAGUES. THE GREEK GOVERNMENT WENT AHEAD WITH THE TRIAL OF TWO OF THE GUERRILLAS WHOSE RELEASE HAD BEEN AGREED TO (THE OTHER FIVE HAD ALREADY BEEN SENTENCED). THEY WERE FOUND GUILTY AND SENTENCED TO PRISON TERMS TOTALING MORE THAN 29 YEARS, BUT WERE RELEASED ON AUGUST 12 ACCORDING TO THE AGREEMENT WORKED OUT ON JULY 22.

EVENT #161 THE RAND CHRONOLOGY

EVENT DATED 9 SEPTEMBER 1970, LEBANON, EGYPT & JORDAN

THE POPULAR FRONT FOR THE LIBERATION OF PALESTINE (PFLP) HIJACKED A BOAC VC-10 AND FLEW TO DAWSON FIELD IN JORDAN (BRINGING THE TOTAL NUMBER OF HOSTAGES HELD IN THE DESERT TO 300 AS SOME HOSTAGES WERE ALREADY HELD THERE FROM PREVIOUS HIJACKINGS). NEGOTIATIONS TO FREE THEM WERE COMPLICATED BY THE OUTBREAK OF FIGHTING BETWEEN JORDANIAN TROOPS AND PALESTINIAN GUERRILLAS. ON SEPTEMBER 12, THE REMAINING PASSENGERS (WOMEN AND CHILDREN HAD BEEN REMOVED EARLIER) WERE EVACUATED AND THE 3 PLANES (2 OF WHICH WERE THERE FROM PREVIOUS HIJACKINGS) WERE BLOWN UP. MOST OF THE PASSENGERS WERE SOON RELEASED, BUT THE PFLP CONTINUED TO HOLD 58 HOSTAGES TO EXERT PRESSURE ON THE EUROPEAN GOVERNMENTS. THE HOSTAGES WERE RELEASED ON SEPT. 25, 26 AND 29. ON SEPT. 29, THE SWISS AND WEST GERMAN GOVERNMENTS WOULD FREE 7 ARAB GUERRILLAS WHEN THE LAST 6 HOSTAGES (WHO WERE U.S. CITIZENS) HAD LEFT JORDAN. THE 7 PRISONERS WERE RELEASED AND FLOWN TO CAIRO ON SEPTEMBER 30.

EVENT #220 THE RAND CHRONOLOGY

EVENT DATED 29 MAY 1971, SPAIN

BASQUE NATIONALISTS ATTEMPTED TO KIDNAP HENRI WOLIMER, THE FRENCH CONSUL, IN SAN SEBASTIAN. HE RESISTED AND ESCAPED.

EVENT #239 THE RAND CHRONOLOGY

EVENT DATED 15 DECEMBER 1971, UNITED KINGDOM

BLACK SEPTEMBER ORGANIZATION (BSO) MEMBERS ATTEMPTED TO ASSASSINATE ZAID RIFAI, THE JORDANIAN AMBASSADOR IN LONDON.

EVENT #250 THE RAND CHRONOLOGY

EVENT DATED 22 FEBRUARY 1972, UNITED KINGDOM

A BOMB PLANTED BY THE IRISH REPUBLICAN ARMY (IRA), PROVISIONAL WING, EXPLODED AT ALDERSHOT ARMY BASE IN ENGLAND, KILLING SEVEN AND WOUNDING FIVE, TWO OF WHOM SUBSEQUENTLY DIED.

EVENT #281 THE RAND CHRONOLOGY

EVENT DATED 16 AUGUST 1972, ITALY

AN EL AL ISRAEL AIRLINES PLANE WAS DAMAGED, SHORTLY AFTER TAKE-OFF FROM ROME, BY A BOMB CONCEALED IN ITS LUGGAGE COMPARTMENT. THE BOMB HAD BEEN HIDDEN IN A RECORD PLAYER GIVEN TO TWO ENGLISH GIRLS BY TWO ARABS. A NEW GUERRILLA GROUP, CALLING ITSELF NATIONALIST GROUP FOR THE LIBERATION OF PALESTINE, CLAIMED CREDIT FOR THE ATTACK. TWO ARABS WERE RELEASED BY ITALIAN AUTHORITIES AFTER A SHORT DETENTION.

EVENT #283 THE RAND CHRONOLOGY

EVENT DATED 29 AUGUST 1972, GREECE

A BOMB EXPLODED IN THE U.S. EMBASSY IN ATHENS, CAUSING SLIGHT DAMAGE. THE POPULAR REVOLUTIONARY RESISTANCE GROUP CLAIMED RESPONSIBILITY FOR THE INCIDENT.

EVENT #329 THE RAND CHRONOLOGY

EVENT DATED 23 JANUARY 1973, HAITI

TWO ARMED MEN AND ONE WOMAN KIDNAPPED CLINTON E. KNOX, U.S. AMBASSADOR TO HAITI, AND HELD HIM HOSTAGE IN HIS OWN RESIDENCE. WHEN U.S. CONSUL GENERAL WARD L. CHRISTENSEN ARRIVED AT THE AMBASSADOR'S RESIDENCE, HE TOO WAS TAKEN HOSTAGE. IN RETURN FOR THE TWO AMERICAN HOSTAGES, THE KIDNAPPERS DEMANDED THE RELEASE OF 30 PRISONERS AND A RANSOM OF 1 MILLION DOLLARS.

IN SUBSEQUENT NEGOTIATIONS IN WHICH THE FRENCH AMBASSADOR ACTED AS INTERMEDIARY, THE KIDNAPPERS AGREED TO ACCEPT THE RELEASE OF 12 PRISONERS AND THE PAYMENT OF \$70,000. THE KIDNAPPERS RELEASED THEIR HOSTAGES AFTER 18 HOURS AND FLEW WITH THE RELEASED PRISONERS TO MEXICO. THE MEXICAN GOVERNMENT GAVE THE GROUP ASYLUM BUT CONFISCATED THE MONEY. THE GROUP CLAIMED TO BE LINKED WITH THE COALITION OF NATIONAL BRIGADES, AN ANTI-DUVALIER EXILE ORGANIZATION.

EVENT #336 THE RAND CHRONOLOGY

EVENT DATED 27 JANUARY 1973, UNITED STATES

A MAN OF ARMENIAN ORIGIN MURDERED THE TURKISH CONSUL GENERAL AND VICE CONSUL IN LOS ANGELES IN REVENGE FOR TURKISH ATTACKS ON ARMENIANS IN 1915.

EVENT #349 THE RAND CHRONOLOGY

EVENT DATED 8 MARCH 1973, UNITED KINGDOM

TWO BOMBS EXPLODED IN LONDON, KILLING ONE PERSON AND INJURING 200. THE IRISH REPUBLICAN ARMY (IRA) WAS BELIEVED TO BE RESPONSIBLE.

EVENT #350 THE RAND CHRONOLOGY

EVENT DATED 10 MARCH 1973, UNITED KINGDOM

A BOMB BELIEVED TO HAVE BEEN PLANTED BY THE IRISH REPUBLICAN ARMY (IRA) EXPLODED AT A HALL IN GLASGOW WHERE PROTESTANT SUPPORTERS OF BRITISH RULE IN NORTHERN IRELAND WERE TO HAVE HELD A DANCE.

EVENT #374 THE RAND CHRONOLOGY

EVENT DATED 21 APRIL 1973, GREECE

A BOMB EXPLODED UNDER THE CAR OF THE ITALIAN VICE CONSUL IN ATHENS. A GREEK CITIZEN PASSING BY SUFFERED SEVERE INJURIES. A CAR OWNED BY AN AMERICAN EMPLOYEE OF THE EUROPEAN EXCHANGE SERVICE ALSO WAS SLIGHTLY DAMAGED BY A SMALL BOMB. LEAFLETS ATTRIBUTED THE ACTIONS TO THE NATIONAL YOUTH RESISTANCE ORGANIZATION.

EVENT #384 THE RAND CHRONOLOGY

EVENT DATED 30 APRIL 1973, LEBANON

LEBANESE TROOPS ARRESTED FOUR ARAB GUERRILLAS, WHO WERE RIDING IN A CAR WITH WEAPONS, EXPLOSIVES AND A RADIO TRANSMITTER, AS THEY APPROACHED THE U.S. EMBASSY IN BEIRUT. THEY WERE BELIEVED TO BE MEMBERS OF THE BLACK SEPTEMBER ORGANIZATION (BSO). POLICE LATER REPORTED THAT FIVE OTHER ARMED PALESTINIANS WERE ROUNDED UP IN CONNECTION WITH THE ABORTIVE ATTACK.

EVENT #419 THE RAND CHRONOLOGY

EVENT DATED 19 JULY 1973, GREECE

A LONE PALESTINIAN GUERRILLA, ARMED WITH A MACHINE GUN AND HAND GRENADES, ATTEMPTED TO ATTACK THE EL AL ISRAEL AIRLINES OFFICE IN ATHENS. HE WAS PREVENTED FROM ENTERING THE OFFICE WHEN A GUARD PRESSED A SECURITY LOCK THAT CLOSED INNER DOORS MADE OF BULLET-PROOF GLASS. THE TERRORIST THEN FLED TO A NEARBY HOTEL WHERE HE CORNERED 17 HOSTAGES. NEGOTIATIONS UNDERTAKEN BY THE AMBASSADOR OF EGYPT, LIBYA AND IRAQ CONTINUED FOR SEVERAL HOURS. IT WAS FINALLY AGREED TO LET THE TERRORIST FLY TO KUWAIT, WHERE HE VANISHED. THE HOSTAGES WERE UNHARMED. THE MAN SAID HE WAS A MEMBER OF THE ORGANIZATION OF VICTIMS OF OCCUPIED TERRITORIES. ARAB OFFICIALS SAID THAT THEY HAD NO KNOWLEDGE OF THE ORGANIZATION.

EVENT #439 THE RAND CHRONOLOGY

EVENT DATED 5 SEPTEMBER 1973, ITALY

ITALIAN MILITARY POLICE ARRESTED FIVE ARAB TERRORISTS WHEN THEY SAID THEY WERE PLANNING TO SHOOT DOWN AN EL AL ISRAEL AIRLINES PLANE AT THE ROME AIRPORT. ONE OF THE TERRORISTS AND TWO SOVIET MADE PORTABLE HEAT-SEEKING GROUND TO AIR MISSILES WERE CAPTURED. THE TERRORISTS WENT BEFORE AN ITALIAN COURT (2 WERE IN ABSENTIA). THREE OF THE TERRORISTS WERE FOUND GUILTY AND SENTENCED TO 5 YEARS AND 2 MONTHS IN PRISON, AND THEN RELEASED ON \$29,500 BOND EACH. THE TWO WHO WERE TRIED IN ABSENTIA WERE THOUGHT TO BE HIDING IN LIBYA.

EVENT #454 THE RAND CHRONOLOGY

EVENT DATED 10 OCTOBER 1973, MEXICO

TERRORISTS KIDNAPPED ANTHONY WILLIAMS, A BRITISH CONSUL IN MEXICO, AND DEMANDED THE RELEASE OF 51 POLITICAL PRISONERS AND \$200,000 RANSOM. THE MEXICAN GOVERNMENT REFUSED TO RELEASE ANY PRISONERS. WILLIAMS WAS RELEASED UNHARMED ON OCTOBER 14. IT WAS NOT KNOWN WHETHER RANSOM WAS PAID. A GROUP CALLING ITSELF THE 23RD OF SEPTEMBER COMMUNIST LEAGUE CLAIMED RESPONSIBILITY.

EVENT #470 THE RAND CHRONOLOGY

EVENT DATED 18 DECEMBER 1973, UNITED KINGDOM

TWO BOMBS IN CARS AND A BOMB IN A PARCEL EXPLODED IN LONDON, INJURING 60 PEOPLE. THE INCIDENT WAS BELIEVED TO HAVE BEEN IN REPRISAL FOR THE JAILING OF IRISH REPUBLICAN ARMY (IRA) TERRORISTS WHO BOMBED THE OLD BAILEY IN MARCH 1973.

EVENT #471 THE RAND CHRONOLOGY

EVENT DATED 20 DECEMBER 1973, SPAIN

PREMIER LUIS CARRERO BLANCO WAS ASSASSINATED IN MADRID, APPARENTLY BY SIX BASQUE NATIONALISTS. HIS CHAUFFEUR AND A POLICE GUARD WERE ALSO KILLED IN THE EXPLOSION THAT LIFTED THEIR CAR FIVE STORIES OFF THE STREET. THE BASQUE TERRORIST GROUP, NATION AND LIBERTY (ETA), IN BORDEAUX, FRANCE, CLAIMED CREDIT FOR THE ASSASSINATION, SAYING IT WAS IN REVENGE FOR THE KILLING OF NINE BASQUE MILITANTS BY THE GOVERNMENT AND TO FIGHT REPRESSION IN SPAIN.

EVENT #487 THE RAND CHRONOLOGY

EVENT DATED 3 FEBRUARY 1974, UNITED KINGDOM

FOUR GUNMEN CLAIMING MEMBERSHIP IN THE IRISH REPUBLICAN ARMY (IRA)
ROBBED A BANK AT STANSTED AIRPORT, NEAR LONDON, OF \$80,000.

EVENT #516 THE RAND CHRONOLOGY

EVENT DATED 15 JULY 1974, JAPAN

A JAPAN AIR LINES JETLINER WAS HIJACKED BY A LONE JAPANESE HIJACKER
WHO DEMANDED THE RELEASE OF AN IMPRISONED RED ARMY MEMBER AND A PLANE TO
FLY THEM TO NORTH KOREA. THE JAPANESE POLICE CAPTURED THE HIJACKER.

EVENT #517 THE RAND CHRONOLOGY

EVENT DATED 16 JULY 1974, UNITED KINGDOM

A BOMB PLANTED BY THE IRISH REPUBLICAN ARMY (IRA) EXPLODED IN
MANCHESTER, ENGLAND, INJURING TWO PERSONS.

APPENDIX C

NEGATIVE ATTITUDE OBJECTS

arm	error	prisoner
army	exclusive	prohibit
attack	exploited	reckoning
attempt	explosive	resist
barricade	farcical	revolution
bomb	far from	robbery
bourgeoisie	fear	ruffian
casualty	fight	security
caution	guerrilla	seizure
challenge	hijack	sentence
cowardly	imperialist	shoot
commando	impetuous	strategic
combat	invade	struggle
criminal	kidnap	target
death	kill	topple
deadline	lack	torture
demand	limit	unexpected
demonstration	military	uprising
detain	misery	uproar
dictatorship	mistreat	violent
enemy	negative	war
		weapon

APPENDIX D

NEGATIVE VERBAL CONNECTORS

accouse
blockade
blowing up
bragging
breaking
cannot
demand
denounce
defray
detained
do not

endanger
failed
fight
gave in
go beyond
kidnap
leaving
lied
lose
lost
no

not
nothing
risking
stole
struck
suffering
talking back
torture
violate
warn
will not

APPENDIX E

NEGATIVE CONNOTATION COMMON MEANING/ATTITUDE OBJECTS

MOST THREATENING (-3)	OVERT HARM (-2)	NEGATIVE CONNOTATION (-1)		
assassination	badly hit	accomplice	establishment	not exist
elimination	blow up	accuse	excite	not good
execution	bomb	against	exclusive	oppress
death	burn	aggressive	exempted	outrage
destruction	capture	ammunition	exploit	overthrow
kill	collar	armed	false	pay
murder	combat	arms	fanatic	persecute
rub-out	criminal	average	far from	precaution
	destroy	back-to-the-wall	fixed (rigid)	pressure
	explode	barricade	farce	probation
	fight	bazooka	force (military)	prohibit
	fire	betray	fragment	propaganda
	go off	bourgeois	got (captured)	provoke
	(explode)	bum	hate	radical
	guerrilla	capitalistic	hide	regret
	handcuff	caught	hostile	replace
	hijack	caution	humiliate	repress
	hostage	charge	illusion	revenge
	hurt	close	impairing	security
	imprison	collect	imperil	shake-up
	jail	control	impossible	sick
	kidnap	contract	impotent	smash
	no cease fire	contrast	incident	starve
	not be freed	convict	inhuman	strategic
	prisoner	corrupt	liar	strip
	punish	counterintelligence	lose	struggle
	revolution	cut off	mercenary	swindle
	seize	dead line	militant	take
	shoot	defeat	military	talked about
	striking	demand	mistreat	target
	torture	dictatorship	mortar	terrible
	uprising	different	must go	topple
	war	difficult	necks	threat
		direct	negative	trap
		discontent	never	treason
		disorder	no better	unexpected
		end	no concessions	violence
		enemy	no desire	weak
		errors	no opportunity	weapon
				worry
				worsen

POSITIVE CONNOTATIONS

Neutral/Non Threatening/Indeterminate			Postive/Good		Highly Positive
(+1)			(+2)		Least Threat
					(+3)
acts	imminent	politician	alike	objective	calm
again	impact	portrait	authenticate	offer	escape
aim	indispensable	poster	asylum	operation	free
air	in fashion	PR	attract	parade	help
ambassador	intensify	print	choice	permit	independence
ask	intention	property	class	plan	justice
bowling	introduce	psychological	clear	political	law
cadres	investigate	public	commemorate	positive	liberate
car	issue	publication	complete	propose	liberty
certain	it	RAV	conscious	ready	life
circumstantial	Jew	read	coordinate	reason	love
Chicago	know	reply	correct	rebuild	protect
civilian	Korea	return	development	remain	release
communist	large	route	effective	respite	rescue
count	Marxist	sea	enormous	responsible	
country	me	see	entrust	satisfy	
day-by-day	means	situation	festivity	secure	
DCG	met	spring	formula	social	
demonstration	Mexico	statement	goal	solution	
doing	Miami	structure	hear	strong	
equipment	move	this	home	success	
everyone	Mr. Elbrick	tell	important	sufficient	
everything	MR-8	to do	informed	suitable	
eventuality	New York	to go	instruction	support	
Ferando	NLA	trip	interest	sympathy	
flag	no reprisals	unknown	justify	tolerate	
flight	organization	URD	just-the-same	try	
follow	over	US	logical	understand	
girls	parliament	vanguard	maneuverable	unify	
government	party	women	movement	upright	
Greeks	people	word	negotiate	usual	
him	plane	you	normal	victory	

APPENDIX F

MAILING LIST DEMOGRAPHIC DATA AND RESPONSE INFORMATION

Community	SIZE OF MAILING LIST				RESPONSE INFORMATION			
	Sub-set 1	Sub-set 2	Total	Per cent of total	Sub-set 1	Sub-set 2	Total	Per cent of total
	-	-	-	-	-	-	-	-
Government	-25	25	50	26%	- 12	21	33	29%
	-	-	-	-	-	-	-	-
Military	-12	13	25	13%	- 8	10	18	16%
	-	-	-	-	-	-	-	-
Law Enforcement	-11	11	22	12%	- 6	6	12	10%
	-	-	-	-	-	-	-	-
Private Enterprise	-11	12	23	12%	- 10	5	15	13%
	-	-	-	-	-	-	-	-
Academia	-17	17	34	18%	- 7	10	17	15%
	-	-	-	-	-	-	-	-
Policy Research	-18	18	36	19%	- 9	10	19	17%
	-	-	-	-	-	-	-	-
Total	-94	96	190	100%	- 52	62	114	100%

THREAT SCALE QUESTIONNAIRE MAILED TO EXPERTS

NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA - 93940

IN REPLY REFER TO
DECEMBER 1976

DEAR

THIS QUESTIONNAIRE IS INTENDED TO GATHER INFORMATION WHICH WILL BE USED IN A GRADUATE THESIS. THE OBJECTIVE OF THE QUESTIONNAIRE IS TO DETERMINE THE EXTENT TO WHICH EXPERTS GENERALLY AGREE ON THE SERIOUSNESS TO THE UNITED STATES OF SPECIFIC PAST TERRORIST INCIDENTS. IF A USEFUL DEGREE OF CONSENSUS IS FOUND, THE RESULTS WILL BE USED TO DEVELOP A SCALE TO MEASURE THE SERIOUSNESS OF TERRORIST EVENTS AND SUBSEQUENTLY TO SEE IF THE EVENTS HAVE COMMON UNDERLYING CHARACTERISTICS RELATED TO THIS MEASURE.

FOR THE PURPOSES OF THIS STUDY, TERRORIST THREAT SHOULD BE VIEWED AS A MEASURE OF THE PHYSICAL AND/OR PSYCHOLOGICAL IMPACT OF A TERRORIST INCIDENT WHICH YOU CONSIDER TO HAVE BEEN INIMICAL TO U.S. INTERESTS. U.S. INTERESTS ARE CONSIDERED TO INVOLVE A MULTITUDE OF DIPLOMATIC, POLITICAL, ECONOMIC AND MILITARY INTERACTIONS IMPORTANT TO U.S. NATIONAL SECURITY.

EACH OF THE ENCLOSED CARDS CONTAINS A STANDARDIZED DESCRIPTION OF A PAST TERRORIST INCIDENT. THESE INCIDENTS WERE SELECTED AT RANDOM FROM A STRATIFIED LIST OF INTERNATIONAL TERRORIST INCIDENTS OCCURRING FROM 1968 TO 1974. A RECOMMENDED PROCEDURE IS TO REARRANGE THE CARDS UNTIL YOU ARE SATISFIED THAT THEY ARE RANKED IN ORDER OF SERIOUSNESS. YOUR EXPERT OPINION ON NATIONAL SECURITY MATTERS SHOULD COME INTO PLAY AS YOU RANK THE INCIDENTS. THE RESULTS SHOULD BE RECORDED ON THE ENCLOSED POST CARD BY RECORDING EACH INCIDENT DATE ON THE CARD IN DECREASING ORDER OF SERIOUSNESS.

IF YOU WOULD LIKE A REPORT OF THE RESULTS OF THIS QUESTIONNAIRE, PLEASE INCLUDE YOUR RETURN ADDRESS ON THE POST CARD. RESPONDENTS WILL NOT, IN ANY WAY, BE IDENTIFIED IN THE RESULTS OF THE STUDY.

THANKING YOU IN ADVANCE,

ROBERT W. PETERSON

APPENDIX H

PROCEDURES EMPLOYED FOR OBTAINING AN INTERVAL SCALE FROM THE EXPERTS ORDINAL JUDGMENTS CONCERNING THE THREAT ASSOCIATED WITH A TERRORIST INCIDENT

1. The expert's responses are tallied in a frequency matrix. The number f_{ij} represents the number of experts who indicated that incident j was more threatening than incident i . If a and b are two incidents, the number $f_{ab} + f_{ba}$ is the number of experts comparing the threat of incident a with incident b . Only the bottom half of the f_{ij} matrix has been completed in view of the fact that the matrix is complimentary around the diagonal axis and the total number of judges is known (i.e.: the upper half of the matrix is redundant as it is the arithmetic reciprocal of the upper half of the matrix).
2. From the frequency matrix, a proportion matrix is computed. The p_{ij} matrix indicates the proportion of the experts comparing the threat associated with i and j who indicated that j was more threatening than i .

$$p_{ij} = \frac{f_{ij}}{f_{ij} + f_{ji}}$$

Here again only the bottom half of the matrix is included. If a and b are two incidents, $p_{ab} + p_{ba} = 1$ making the upper half of the matrix redundant. The diagonal of the matrix is set at $= 0.5$, based on the assumption of normal distribution of expert perceptions.

3. Using a table of standard normal probability distribution, a matrix is prepared of the Z scores for each proportion. The Z_{ij} matrix is symmetrical about the diagonal with the absolute values equal and one cell of the matrix is the negative value of the corresponding cell across the diagonal. To avoid the bias that would be introduced by very large or very small Z scores,

p_{ij} values greater than 0.98 or less than 0.02 are omitted.

4. If the Z_{ij} matrix has no empty cells resulting from extreme p_{ij} values the column averages are computed as the scale value for each incident.

The relatively large size of the matrix (16 X 16 cells) and general consensus on the part of the experts regarding the threat ranking of the incidents on the extremes of the scales resulted in empty cells in all the matrix. To obtain scale values in this circumstance it was necessary to solve a set of simultaneous equations using the form:

$$n_j s_j - \sum_{i \in \phi_j} s_i = \sum_{i \in \phi_j} Z_{ij}$$

where j denotes the set of n_j elements in column j of the Z_{ij} matrix. The matrix as developed from the set of simultaneous equations are diagonally dominant and were solved using a standard program on the Hewlett Packard 9810 desk top computer.

SET ONE PROPORTION MATRIX

EVENT NR.	13	50	56	68	102	112	142	239	281	336	349	350	374	454	471	517
13	.5															
50	.75	.5														
56	.22	.21	.5													
68	.11	.05	.78	.5												
102	.14	.09	.19	.86	.5											
112	.54	.38	.75	.95	.94	.5										
142	.37	.29	.49	.86	.64	.21	.5									
239	.57	.51	.76	.57	.89	.62	.83	.5								
281	.73	.33	.68	.43	.91	.35	.73	.76	.5							
336	.38	.37	.62	.87	.78	.46	.48	.4	.54	.5						
349	.68	.6	.84	.92	.87	.7	.89	.65	.25	.65	.5					
350	.7	.62	.92	.93	.91	.76	.92	.84	.65	.75	.79	.5				
374	.64	.52	.86	.94	.87	.62	.84	.53	.77	.73	.46	.3	.5			
454	.49	.44	.64	.91	.81	.38	.66	.32	.56	.54	.27	.13	.37	.5		
471	.56	.48	.71	.94	.85	.44	.51	.43	.65	.58	.27	.19	.43	.67	.5	
517	.43	.7	.94	.94	.91	.79	.92	.76	.89	.76	.75	.35	.7	.83	.86	.5

SET TWO PROPORTION MATRIX

EVENT NR.	2	31	50	68	161	220	250	283	329	336	384	419	439	470	487	516
2	.5															
31	.8	.5														
50	.87	.8	.5													
68	.2	.2	.1	.5												
161	.46	.44	.27	.57	.5											
220	.96	.94	.7	.98	.72	.5										
250	.83	.83	.54	.9	.96	.27	.5									
283	.77	.83	.28	.96	.72	.17	.32	.5								
329	.44	.37	.07	.8	.5	.94	.15	.07	.5							
336	.88	.83	.35	.9	.85	.67	.44	.6	.82	.5						
384	.8	.72	.28	.89	.83	.09	.24	.09	.85	.35	.5					
419	.85	.85	.44	.89	1	.26	.41	.65	.89	.48	.65	.5				
439	.56	.57	.28	.63	.69	.13	.19	.43	.59	.32	.35	.28	.5			
470	.8	.93	.54	.85	.94	.33	.33	.7	.82	.6	.74	.56	.83	.5		
487	.98	.04	.77	.93	.98	.57	.87	.89	.96	.75	.95	.85	.96	.94	.5	
516	.93	.93	.6	.93	.94	.35	.63	.78	.93	.59	.83	.76	.91	.65	.3	.5

SET ONE Z_{ij} MATRIX

EVENT NR.	13	50	56	68	102	112	142	239	281	336	349	350	374	454	471	517
13	0	-.66	.77	1.22	1.1	.1	.34	-.18	-.61	.3	-.47	-.57	-.34	.02	-.14	.18
50	.66	0	.82	1.67	1.3	.3	.57	-.02	.45	.34	-.26	-.3	-.06	.14	.06	-.52
56	-.77	-.82	0	-.77	.88	-.66	.02	-.7	-.47	-.3	-.99	1.4	1.07	-.34	-.57	1.5
68	-1.22	-1.67	.77	0	-1.1	-1.7	-1.1	-.18	.18	-1.1	-1.1	-1.67	-1.5	-1.3	-1.5	-1.5
102	-1.1	-1.3	-.88	1.07	0	-1.5	-.34	-1.2	-1.3	-.77	-1.1	-1.3	-1.22	-.88	-.94	-1.3
112	.1	-.3	.66	1.67	1.5	0	.82	-.3	.39	.09	-.52	-.71	-.3	.3	.14	-.82
142	-.34	-.57	-.02	1.07	.34	-.82	0	-.94	-.6	.06	-1.2	-1.41	-.99	-.43	-.09	-1.4
239	.18	.02	.7	.18	1.2	.3	.94	0	-.7	.26	-.39	-.99	-.06	.47	.18	-.71
281	.61	-.43	.48	-.18	1.3	-.39	.6	.7	0	-.09	.66	-.39	-.77	-.14	-.39	-1.2
336	-.3	-.34	.3	1.14	.77	-.1	-.06	-.26	.09	0	-.39	-.66	-.61	-.09	-.22	-.71
349	.47	.26	.99	1.44	1.1	.52	1.22	.39	-.66	.39	0	-.82	.09	.61	.61	-.66
350	.57	.3	1.4	1.67	1.3	.7	1.4	.99	.39	.66	.82	0	.52	1.1	.88	-.39
374	.34	.06	1.1	1.53	1.2	.3	.99	.06	.77	.61	-.09	-.52	0	.35	.18	-.52
454	-.02	-1.39	.34	1.3	.88	-.3	.45	-.48	.14	.09	-.61	-1.14	-.35	0	-.43	-.94
471	.14	-.06	.56	1.5	.94	.14	.02	-.18	.39	.22	-.61	-.83	-.18	.43	0	-1.07
517	-.18	.52	1.5	1.5	1.3	.82	1.4	.71	1.2	.71	.66	-.39	.52	.94	1.07	0

SET TWO Z₁₂ MATRIX

EVENT NR.	2	31	50	68	161	220	250	283	329	336	384	419	439	470	487	516
2	0	-.83	-1.13	.83	.09	-1.8	-.97	-.77	.14	-1.2	-.9	-1.1	-.14	-.9	-2.1	-1.44
31	.83	0	-.89	.89	.14	-1.6	-.97	-.97	.33	-.97	-.6	-1.1	-.19	-.15	1.8	-1.4
50	1.13	.89	0	1.53	.59	-.54	-.09	.59	1.5	.39	.6	.14	.59	-.46	-.77	-.28
68	-.83	-.89	-1.33	0	-.19	-.21	-1.3	-.8	-.83	-1.3	-1.2	-1.2	-.33	-1.1	-1.5	-1.45
161	-.09	-.14	-.59	.19	0	-.59	-1.8	-.59	0	-1.1	-.97	xxxx	-.48	-1.6	-2.1	-1.6
220	1.79	1.6	.53	.21	.59	0	.59	.97	-1.6	-.43	1.3	.65	1.13	.43	-.19	.38
250	.93	.97	.09	1.3	1.8	-.59	0	.48	1.1	.14	.7	.23	.89	.43	-1.3	-.33
283	.77	.97	-.59	1.8	.59	-.97	-.48	0	1.5	-.23	1.3	-.38	.19	-.54	-1.2	-.77
329	-.14	-.33	-1.45	.83	0	1.59	-1.04	-1.4	0	-.89	-1.1	-1.2	-.23	-.89	-1.8	-1.5
336	1.22	.97	-.38	1.3	1.1	.43	-.14	.23	.9	0	.38	.05	.48	-.28	-.71	-.23
384	.89	.59	-.59	1.2	.97	-1.3	-.7	-1.3	1.1	-.38	0	-.38	.38	-.65	-1.6	-.97
419	1.04	1.04	-1.14	1.2	xx	-.65	-.23	.38	1.2	-.05	.38	0	.6	-.14	-1.1	-.7
439	.14	.19	-.59	.33	.48	-1.3	-.89	-.19	.23	-.48	-.38	-.59	0	-.97	-1.8	-1.3
470	.89	1.45	.46	1.1	1.6	-.43	-.43	.54	.9	.28	.65	.14	.97	0	-1.6	-.4
487	2.1	-1.8	.76	1.5	2.1	-.19	1.28	1.2	1.8	.7	1.59	1.1	1.79	1.6	0	.54
516	1.44	1.44	.28	1.5	1.6	-.38	.33	.77	1.5	.23	.97	.7	1.33	.38	-.54	0

INDEPENDENT ITERATE VARIABLES

CASE-N	SELECTIV	ALPHAS	NUMERS	ALPHAS	KILLERS	KILLERS	USCITV
1	2	1	4	0	0	3	1
2	2	1	2	0	0	1	9
3	2	1	2	0	0	1	9
4	2	1	2	0	0	0	1
5	2	1	2	0	0	0	1
6	2	1	4	0	0	0	1
7	2	1	4	0	0	0	9
8	1	1	5	0	0	0	2
9	1	1	6	0	0	0	2
10	1	1	2	0	0	0	1
11	1	1	2	0	0	0	2
12	2	1	1	0	0	0	2
13	2	1	4	0	0	0	2
14	2	1	2	0	0	0	9
15	2	1	2	0	0	0	1
16	2	1	3	0	0	0	1
17	2	1	4	0	0	0	2
18	1	0	1	0	0	0	1
19	1	1	4	0	0	0	2
20	1	1	2	0	0	0	2
21	2	1	5	0	0	0	1
22	2	1	5	0	0	0	2
23	2	1	4	0	0	0	2
24	2	1	4	0	0	0	2
25	2	1	4	0	0	0	2
26	1	1	4	0	0	0	2
27	1	1	1	0	0	0	2
28	1	1	1	0	0	0	2
29	1	1	1	0	0	0	2
30	1	1	1	0	0	0	2

DEPENDENT VARIABLES

Threat Scores By Type Of Event

CASE-N	CODE1*	BUSS	SCAL	RSRCH	LAW	GVMT	MIL	OVRL
1	2	2.49	2.21	2.87	1.95	2.69	3.57	2.78
2	13	1.84	2.14	1.91	2.20	2.19	1.00	1.92
3	31	2.35	2.05	2.72	2.13	3.12	3.11	2.40
4	50	1.95	1.98	1.61	1.80	1.00	1.96	1.67
5	56	2.37	2.41	2.64	2.24	2.72	3.17	2.51
6	68	2.79	2.54	3.02	2.19	3.72	3.43	2.99
7	102	2.42	2.68	2.91	2.09	3.30	3.09	2.79
8	112	1.74	2.09	2.29	1.19	1.85	2.75	1.12
9	142	1.77	2.56	2.71	1.65	2.76	2.94	2.39
10	161	2.79	2.50	2.68	1.99	3.43	3.14	2.86
11	220	1.69	1.00	1.27	1.44	1.63	2.06	1.59
12	239	1.53	2.19	2.05	1.86	2.10	2.09	1.88
13	250	2.00	1.56	2.15	1.59	2.07	2.22	1.59
14	281	1.75	2.53	2.05	1.72	2.49	2.77	1.95
15	283	2.24	1.33	2.49	1.92	2.93	2.48	1.90
16	329	2.55	2.44	3.14	2.05	3.25	3.05	2.62
17	336	1.67	1.04	1.48	2.20	2.56	2.38	1.69
18	349	1.29	2.72	1.31	1.27	1.69	2.96	1.64
19	350	1.00	2.27	2.94	0.98	1.42	1.83	1.22
20	374	1.41	2.17	1.00	1.50	1.91	2.47	1.61
21	384	2.18	1.79	2.61	1.83	2.47	2.41	2.19
22	419	2.17	1.76	2.60	1.64	2.03	2.41	1.78
23	439	2.55	2.72	2.29	2.16	3.02	3.03	2.46
24	454	2.13	2.46	1.99	1.43	2.29	2.69	2.05
25	470	2.14	1.32	1.86	1.00	3.38	2.31	1.64
26	471	1.59	2.14	1.90	1.62	2.04	2.33	1.91
27	487	1.86	4.01	1.44	1.57	1.64	1.39	1.00
28	516	1.86	1.26	1.77	1.76	1.59	2.28	1.31
29	517	1.28	2.26	1.34	1.05	1.19	1.89	1.26

* Event # as per Appendix B.

INDEPENDENT CONTENT ANALYSIS VARIABLES

<u>CASE-N</u>	<u>CODE1*</u>	<u>LINESPRI</u>	<u>LINESAFT</u>	<u>TOTALLIN</u>	<u>CNTRYLIN</u>	<u>FBISDATE</u>	<u>ARTCLS</u>	<u>ATOMICST</u>	<u>ATOMICAN</u>	<u>DRCTNA</u>	<u>DRCTNST</u>
1	2	0	227	227	227	7	7	20	-0.80	-0.32	34
2	13	0	94	94	N/A	2	3	35	-1.57	+0.71	34
3	31	0	81	81	81	5	5	1	-1.50	-1.67	3
4	50	0	19	19	0	1	1	2	-4.00	-2.00	3
5	56	232	122	354	354	20	26	10	-2.90	-0.58	13
6	68	131	864	995	883	16	32	199	-1.15	+0.41	214
7	102	155	35	190	187	7	8	13	-2.92	-1.73	22
8	112	53	1227	1280	335	8	15	56	+0.67	+0.72	53
9	142	0	57	57	57	6	6	9	-2.92	-1.76	12
10	161	0	2665	2665	1679	23	91	113	-0.96	-0.48	124
11	220	30	0	30	30	1	1	0	N/A	N/A	6
12	239	58	66	124	0	3	4	0	N/A	N/A	0
13	250	0	0	0	0	0	0	4	-1.25	-1.00	6
14	281	0	0	0	0	0	0	1	+2.00	-3.00	1
15	283	0	0	0	0	0	0	0	N/A	N/A	0
16	329	5	0	5	5	1	1	6	-2.83	-0.17	6
17	336	0	49	49	N/A	3	4	1	-3.00	-3.00	1
18	349	0	0	0	0	0	0	0	N/A	N/A	0
19	350	0	0	0	0	0	0	0	N/A	N/A	0
20	374	5	24	29	29	3	3	0	N/A	N/A	0
21	389	22	52	74	74	3	8	0	N/A	N/A	0
22	419	0	12	12	6	2	2	6	-3.50	-5.50	8
23	439	0	27	27	0	2	2	0	N/A	N/A	0
24	454	0	100	100	100	5	9	8	+1.50	+3.40	5
25	470	94	0	94	94	1	1	92	-1.33	+0.18	101
26	471	0	483	483	483	6	13	2	-3.00	-2.00	2
27	487	0	0	0	0	0	0	0	N/A	N/A	0
28	516	0	33	33	33	1	1	0	N/A	N/A	0
29	517	7	49	56	56	4	4	1	-6.00	-6.00	1

* Event # as per Appendix B.

APPENDIX J

SUMMARY OF MULTIPLE REGRESSION

(Indication of the R² change associated with the entry of each independent variable into the regression)

Independent Variable	Dependent Variable								
	OVRL	GVMT	MLTRY	PRVT	ENTRPRS	LAW	ACADEMIA	RSRCH	AVG
FBIS Issue Dates	.39*	.26	.28	.23		.2	.007	.005	.32*
Foreign non-combat- ants killed	.02	.008	.02	.02		.05	.1	.15	.1+
Number of entities demands made upon FBIS lines prior	.002	.02	.05	.05		.01	.06	.0009	.02
Number of terrorist groups	.008	.002	.0008	.0008		.02	.006	.07	.007
Domestic non-combat- ants killed	.0008	.004				.0006	.0009	.005	.002
Number of terrorist	.004	.03	.008	.008		.08	.005	.006	.0008
Atomic Content Analysis	.0005	.02	.009	.009		.004	.07	.007	.0008
Total R ²	.42	.33	.32	.32		.33	.25	.25	.46
Level of Significance for the complete regression	0.1	.25	.25	.25		.25	.5	.5	.025

* .005 level of significance

+ .01 level of significance

SUMMARY OF MULTIPLE REGRESSION

(The R² increase associated with the inclusion of the nominal level independent variables in the regression)

Dependent Variable	U.S. Citizen Victim	Nominal Level Independent Variable			Geographic Location
		Selective Target	Official U.S. Installation	Fedayeen Terrorist	
Overall Threat	.45*	.007*	non significant	.04 ⁺	non significant
Government Threat	.42*	.03 ⁺	.16*	non significant	"
Military Threat	.48*	non significant	.04	non significant	"
Private Enterprise Threat	.34	non significant	non significant	non significant	"
Law Enforcement Threat	.29*	.35*	non significant	.04	"
Academia Threat	.06	non significant	non significant	non significant	"
Research Threat	.02	non significant	.02	non significant	"
Average Threat	.113*	.03*	non significant	non significant	.12

Latin America

* .005 level of significance

+ .025 level of significance

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